PROCEEDINGS & TRANSACTIONS

OF THE

FIRST ORIENTAL CONFERENCE, POONA

Held on the 5th, 6th and 7th of November 1919



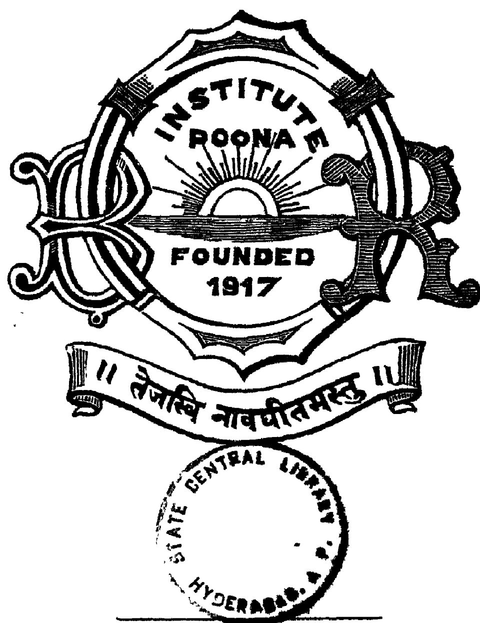
1922

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Vol. II

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PREFACE

It is with many apologies that this Second Volume of the Proceedings and Transactions of the First Oriental Conference, held at Poona under the auspices of the Bhandarkar Oriental Research Institute in November 1919, is being published. This volume contains those papers which the Selection Committee recommended for being printed in extenso, and for which space could be found. The preceding volume, containing a detailed account of the Conference and a summary of all the papers submitted to the Conference, was published in 1920. The work on this volume was taken up towards the end of that year, the intervening period of time being required for the arrangement of the material and for constant references to the Selection Committee and to the scholars concerned.

A word of sincere apology is due to those scholars, whose papers, though recommended by the committee to be printed (and though to print them would have been a privilege and a service to scholarship) had to be omitted as being beyond the ordinary length, and withal too important to be abridged or printed in selections. In such cases the consideration of funds naturally weighed, with the result that not a few of such papers had to be laid aside, much against the wishes of the managers. The Institute is arranging to print most of these in its own Annals. The same considerations of space and funds are mainly responsible for the absence of the Index to this volume, which, though far advanced in execution, has for the present to be laid aside. It

will, however, be printed through the agency of the Institute at no distant date.

It remains to express the Secretaries' sense of gratefulness to many who have generously helped in the execution of this volume. Foremost among such obligations are those of the Chairmen of the different sections. Dr. A. B. Gajendragadkar, M. A., Ph. D., of the Elphinstone College and Mr. P. K. Gode, M. A. of the Bhandarkar Institute were kind enough to read parts of the work in proof and to help in other ways. It is a pleasure to acknowledge these disinterested labours, as also the courtesy and promptness of Mr. Pendherkar, the Manager of the Tutorial Press.

The work which was thus undertaken nearly three years ago comes now to a happy conclusion. The idea, which the Institute inaugurated has taken firm root, as the successful holding of the Second Session of the Conference in Calcutta shows. There is no doubt at Madras and subsequent places the Conference will enter on a life of gradually widening usefulness.

P. D. GUNE,

R. D. KARMARKAR,

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Honorary Joint Secretaries,
First Oriental Conference, Poona.

BHANDARKAR ORIENTAL
RESEARCH INSTITUTE,
POONA CITY,
30th September 1922.

ASURA

BY V. K. RAJWADE

In the *Annals* of the Bhandarkar Oriental Research Institute, I made an attempt recently to determine the meanings of certain words in the *Ṛgveda* such as *āhanas, vihāyas, sasni, mehanā, kṛpā* and *citra*, by collating all the passages in which these words occur in all possible forms and classifying them. I deduced the meanings applicable in almost all cases. I am going to pursue that method in the case of *asura* and hope that the senses I attach will convince you, as they have convinced me.

The word *asura* in all its inflectional and derivative forms occurs about 105 times in the *Ṛgveda.* In some cases it appears to be generic in sense. Sāyaṇa and most modern scholars derive it from *asu* and Sāyaṇa interprets it as *balavān* *i e.* possessed of strength, *prāṇavān* i. e. possessed of life, or *prajñāvān* i. e. possessed of wisdom. *Asura* meaning powerful, full of life, may be used in the case of each and every god, as all of them are full of life and strength. Sometimes Sāyaṇa interprets it as *prāṇadātā* or *baladātā* i.e. one who gives life or strength.

Agni is घृतप्रसत्तो असुरः सुशेवः (5,15,1)–'one that is pleased with ghee, powerful and full of happiness'; न्यग्निः सीददसुरः (7,30,3.)—'Agni' the mighty, sat down'; असुरं सुदक्षं ....मनुना समिद्धं (7-2-3)—the powerful Agni, possessed of great strength, and kindled by Manu'; सम्राजो असुरस्य प्रशस्तिं (7-6-1)—'the praise of the powerful ruler'; प्राग्नये

...असुंराय मन्मं (भरे) (5-12-1)—'let us offer prayer to the powerful Agni.' In all these cases, *asura* seems to be an honorific epithet that can be safely dispensed with.

But in त्वमंग्ने रुद्रो असुंरो महो दिवः (2-1-6)—'thou art the powerful Rudra of the great heaven,' or 'thou art Rudra, being more powerful than the great Dyau;' तविष्यते असुंरः (10-11-6)—'the mighty Agni will grow mightier still', the epithet seems necessary and significant.

As Rudra and the Maruts are mighty forces, the epithet in their case is quite appropriate and necessary. (मरुतो) रुद्रस्य मर्या असुंराः (1-64-2)—(the Maruts) 'the mighty warriors of Rudra.'

But sometimes it may be honorific even in their case as in रुद्रं नमोभिर्देवमसुंरं दुवस्य (5-42-11)—'serve the mighty god Rudra with salutations;' रुद्रस्यं...असुंरस्य वेधसंः (8-20-17)—'of the mighty Rudra, the god of action.' Parjanya also is *asura* as in अर्वाङेतेनं स्तनयित्नुनेह्यपो निषिंचन्नसुंरः पिता नंः (5-83-6)—'O powerful father of us (all), come down dropping rain with this thunder.' Here *asura* may be significant.

Sūrya and Savitṛ are also called *asura* but in an honorific sense as गभीरवेंपा असुंरः सुनीथः (1-35-7)—'Sūrya, mighty, of grave motion, and entitled to good praise'; हिरंण्यहस्तो असुंरः सुनीथः (1-35-10); त्यं चिच्चमसमसुंरस्य भक्षंणं (1-100-3)—'that bowl used for eating by the mighty Savitṛ'; सवितुर्वार्यं महद्वृणीमहे असुंरस्य प्रचेतसः (4-53-1); 'द्विधा सूनवोऽसुंरं स्वर्विदमास्थापयन्त (10-56-6)—'the sons stationed the mighty sun, intimate with heaven, in two ways' (i. e. for rising and setting); प्रति प्रयाणमसुंरस्य विद्वान्त्सूक्तैर्देवं संवितारं दुवस्य (5-49-2)—'knowing the departure of the mighty Savitṛ, praise or serve that god with hymns.'

Soma, who is identified with each and all gods, is

naturally *asura* as in त्रीन्त्स मूर्ध्नो असुरश्चक्र आरभे (9-73-1)—'the powerful Soma made three heads at the beginning (i.e. created the three worlds); सोमो मीढ्वाँ असुरो वेद भूमनः (9-74-7)—'the powerful Soma, raining, knew plenty'; शुक्रां वयन्त्यसुराय निर्णिजं (9-99-1)—'they weave a white filter for the powerful Soma.' In the case of Soma the epithet is purely honorific.

Dyau also is *asura* इन्द्राय हि द्यौरसुरो अनम्नत (1-131-1)—even the powerful Dyau bowed to Indra'; उत वां दिवो असुराय मन्म प्र भरध्वं (5-41-3)—'offer prayers to the powerful Dyau'; न नि मिषति सुरणो दिवेदिवे यदसुरस्य जठरादजायत (3-29-14)—'ever since he was born from the womb of the powerful Dyau, the beautiful son has never winked from day to day i.e. on any day'; शंसामि पित्रे असुराय शेवं (10-124-3)—'I recite pleasing prayers to the powerful father, the Dyau.' Even the powerful Dyau bowed to Indra'; here the epithet is significant and appropriate. In the other quotations it is only honorific.

Mitra and Varuṇa together are called *asura* in the usual generic sense, प्र सा क्षितिरसुर या महि प्रिया (1-151-4)—'that are exceedingly dear to you, O powerful ones'; इमां वां मित्रावरुणा सुवृक्ति...कृण्वे असुरा... (7-36-2)–'O powerful Mitra and Varuṇa, I fashion this well-cut hymn for you;' महान्ता मित्रावरुणा सम्राजा देवावसुरा (8-25-4)—'Mitra and Varuṇa are great, powerful ruling gods.' But the epithet is assertive in ता हि देवानामसुरा (7-65-2)—'they are the strongest of the gods.'

If any one deserves to be called *asura*, it is Indra. या च का च बलकृतिरिन्द्रकर्मैव तत् (*Nirukta*, 7-10) 'wherever there is a deed of physical strength, it must be Indra's,' says Yāska. His protection is solicited because he is powerful. पाह्यसुर त्वमस्मान् (1-174-1); प्र पस्त्यमसुर हर्यतं गोराविष्कृधि

हर्ये सूर्याय (10-96-11)—'O powerful Indra, reveal the pleasant abode of the cow *i. e.* the waters'; महत्तद्वृष्णो असुरस्य नामा विश्वरूपो अमृतानि तस्थौ (3-38-4)—'great is the name of the powerful showerer; of many forms, he presides over the immortal waters'; तमु त्वा नूनमसुर प्रचेतसं राधो भागमिवेमहे (8-90-6)—O powerful, wise one, we beg of thee that protection as though it were part of our food.' बृहच्छ्रवा असुरो बर्हणा कृतः पुरो...(1-54-3)—'the powerful one of wide fame was placed in front because of his valorous deeds. But in his case too the epithet is sometimes honorific.

It is not only individual gods that are *asura*; gods in general are sometimes called *asura.* यद्वाभिपित्वे असुरा ऋतं यते छर्दिर्येम वि दाशुषे (8-27-20)—'or when we shall secure a seat at the general symposium to the sacrificer going to heaven, O powerful ones'; परो दिवा पर एना पृथिव्या परो देवेभिरसुरैर्यदस्ति (10-82-5)—that which is superior to heaven and earth and even the powerful gods'; अयं सोमो असुरैर्नो विहव्यः (1-108-6)—'this Soma of ours is worth being demanded by the powerful gods.'

Asura thus appears to be a generic epithet of the gods, though in a few cases it appropriately means 'powerful, strong.' Why should the gods be called *asura* in so many places in the *Ṛgveda*, though in the same Veda and in subsequent literature the word came to be applied to the enemies of the gods? *Asura* seems to show some desirable good quality. We have seen that in some cases, as in those of Rudra, Maruts, Indra, Mitra and Varuṇa, the meaning 'powerful' is exceedingly applicable. In the case of Varuṇa it seems most so. वरुण...... असुर प्रचेता राजन्नेनांसि शिश्रथः कृतानि (1-24-14)—'O wise and powerful king Varuṇa, loosen the (bonds of) sins committed' (by us).' Varuṇa

is a mighty power, that oversees, detects and punishes sin. The other gods are physically powerful. Varuṇa is morally so. मा नो वधैर्वरुण ये त इष्टावेनः कृण्वन्तमसुर भ्रीणन्ति (2-28-7)--'do not strike us with these destructive weapons, O powerful Varuṇa, which wound one who commits sin in thy sacrifice.' He is a mighty ruler, universal lord--त्वं विश्वेषां वरुणासि राजा ये च देवा असुर ये च मर्ताः (2-27-10). 'He held up the heavens on high, spread out the earth, or measured the width of the earth, and as Universal Ruler, presided over all the worlds; all these are the acts of Varuṇa—अस्तभ्नाद्द्यामसुरो विश्ववेदा अमिमीत वरिमाणं पृथिव्याः। आसीदद्विश्वा भुवनानि सम्राड्विश्वेत्तानि वरुणस्य व्रतानि (8-42-1). असावन्यो असुर सूयत द्यौस्त्वं विश्वेषां वरुणासि राजा। मूर्धा रथस्य चाकन्नैतावतैनसान्तकध्रुक् (10-132-4). Mitra and Varuṇa are contrasted here. 'He (Mitra) is quite different (i.e. inferior to you); (Him) Dyau begot; (but) thou, Oh powerful Varuṇa, art the king of all. He (Mitra) comes as the head of the wheel (the sun). Thou art the hater of even death for sin, though ever so slight.'

All these Ṛks insist on the moral and punitive side of Varuṇa's character and in all he is addressed as *asura*. He seems to have a prior or foremost claim to that epithet but for the following Ṛks.

(मित्रावरुणा) द्यां वर्षयथो असुरस्य मायया (5-63-3)—'You cause heaven to rain down by (using) the thaumaturgy of Asura. धर्मणा मित्रावरुणा विपश्चिता व्रता रक्षेथे असुरस्य मायया (5-63-7) —'Mitra and Varuṇa, wise as you are, you righteously maintain laws by using the power of Asura.' इमामू ष्वासुरस्य श्रुतस्य महीं मायां वरुणस्य प्र वोचम् (5-85-5)—'I have loudly proclaimed this great power or skill of Varuṇa, the well-known Āsura.' Varuṇa is Āsura, i.e. a son of Asura and plies Asura's power or skill. He might be the (eldest) son of Asura and was not primarily Asura him-

self. Mitra and Varuṇa and all the other gods had to do the bidding of Asura. They derived their power or skill from him.

Asura then at one time was supreme master, an over-lord, whose decrees were binding on all. Who was this Asura? The other gods or some of them at least are called *asurasya* vīrāh. इमे भोजा अङ्गिरसो विरूपा दिवस्पुत्रासो असुरस्य वीराः। विश्वामित्राय ददतो मघानि सहस्रसावे प्र तिरन्त आयुः(3-53-7)—'These Bhojas and Aṅgirasas of various forms, sons of Dyau and warriors of Asura, giving riches to Viśvāmitra in the sahasrasāva sacrifice, prolong life.' These Bhojas or Aṅgirasas seem to be the Maruts or some other gods, though Sāyaṇa takes them to be kings. त्रिरुत्तमा दूणशा रोचनानि त्रयो राजन्त्यसुरस्य वीराः (3-56-8)—'three sons of Asura rule over three best and imperishable heavenly worlds' (or worlds of light). Sāyaṇa understands by them Agni, Vāyu, and Sūrya and does not explain the three *Rocanas*. महस्पुत्रासो असुरस्य वीरा दिवो धर्तार उर्विया परि ख्यन् (10-10-2) —'the sons of Mahas, the heroes of Asura and the supporters of heavens, keep an all-round watch far and wide.' दिवस्पुत्रासो असुरस्य वीराः (3-53-7) andमहस्पुत्रासो असुरस्य वीराः in the last quotation, show the identity of Dyau, Mahas and Asura. The Dyau is the Zeus of the Greeks, in whose mythology all the gods, or at least some, are his sons. May not Mahas and Asura be the Mazda and Ahura of Zoroastrianism? European scholars connect Mazda with the Vedic Medhas on the ground that Ahura was the wisest. But this ground is not convincing. In the article on Ormadz in the *Encyclopædia of Religion and Ethics* (vol. ix, p. 568, Col. 2) the writer says that in a list of Assyrian gods published by Vincent Scheil, there occurs the name of Assar Mazaash, which according to him, is Ahura Mazda. I think it

corresponds exactly to Asura Mahas. German orientalists hold the view that the sun-god, moon-good and seven Ādityas were not originally Aryan, but that they were borrowed from Chaldea to which India owes most of her astrology. Assar Mazaash might also have been borrowed from Chaldea and sanskritised as Asura Mahas. Like the Romans in the days of the Empire, the Indian Aryans did not hesitate to adopt foreign gods. They had not the exclusive spirit of the Semitic people.

The two names of Asura and Mahas do not occur in a compound form in the *Ṛgveda* but once or twice they are used in juxtaposition as in महस्पुत्रासो असुरस्य वीराः (10-10-2). The compound name Ahura-Mazda does not occur in the oldest portions of the Avesta. It is only Mazdāh or Mazdāh Ahura. Ahura was only an epithet and applicable to other gods like Mithra and Apām Napāt. It was also prefixed to the names of kings. In the case of Mazdāh, however, it came to be persistently and pre-eminently used, so that ultimately it was considered as exclusively his property. In the *Ṛgveda* the two names or rather the three names Asura, Mahas and Dyau are interchangeable and denote the supreme deity. Dyau is often a masculine word as द्यौरसुरः (1-131-1) अर्चा दिवे बृहते (1-54-3), नमो दिवे बृहते (5-47-7). The absence of the compound name may be used as an argument to prove that the religion of the *Ṛgveda* was earlier than the Chaldean and Mazdean religions and that the borrowing was rather the other way. But this is by the way. Another name that may be considered as interchangeable with these is Amṛtasya, for we have such expressions as शृण्वन्तु विश्वे अमृतस्य पुत्राः आ ये धामानि दिव्यानि तस्थुः (10-13-1) and उप नः सूनवो गिरः शृण्वन्त्वमृतस्य ये

(6-52-9). Asura also seems to have been used in the sense of 'son' as in असुंरो महो दिवः (2-1-6). The gods are *putrāḥ*, *vīrāḥ*, or *sūnavaḥ* of Asura, Mahas, Dyau or Amṛta. In Vedic literature *vīra* often means *putra* अधा स वीरैर्दशभि-र्वि यूंया यो मा मोघं यातुंधानेत्याहं (7-104-15)—'may he be deprived of his ten sons, who for no reason calls me a sorcerer,' says Vaśiṣṭha.

If Asura was the supreme deity once of the Indian Aryans as I think he was, his sons would be naturally called Asura in name and spirit both. Asura then ould be a patronymic, though in some cases the epithet may be significant. In the same way, Amṛta also came to be a patronymic. Agni is called Amṛta (1-44-5), so Rudra (1-114-6), so Indra (5-31-13), so Soma (8-48-3). In Avesta also Agni is called the son of Mazdāḥ–*āthro asurahe mazdao puthra* 'Oh Atar (Agni), thou son of Mazdāh Ahur.'

The name Asura, then, had for a long time no evil meaning attached to it, so that it was often applied to kings and even men. One Tryaruṇa is said to be more powerful than even Indra. (त्र्यरुणः) असुंरो मघोनंः (5-27-1); शतं कक्षीवाँ असुंरस्य गोनां (1-126-2) —'Kakṣīvān received from the powerful Bhāvya a hundred cows;' प्र रामे वोंचमसुंरे' (10-93-14) —'I have sung praises in behalf of Rāma' ; अस्मे वीरो मंरुतः शुष्म्यंस्तु जनांनां यो असुंरो विधर्ता (7-56-24) —'let us have, O Maruts, a strong, powerful son, an upholder of men.' That Asura means powerful, strong is clear from हवं एषामसुंरो नक्षत द्यां (10-74-2)—'the powerful call (neighing) of these (horses) pervades the sky.' Like Asura, the abstract noun Asuratva too showed something praiseworthy. पृथुं योनिंमसुरत्वा संसाद (10-99-2)—'Indra occupied a broad seat on account of his

strength.' यदुष औच्छः प्रथमा विभानामजनयो येन पुष्टस्य पुष्टम्। यत्ते जामित्वमवरं परस्या महन्महत्या असुरत्वमेकं (10-55-4)—'that thou rosest, O dawn, first of (all) lights, that thou begottest the fattest of all the fat lights (the sun), that though so exalted, thou shouldst maintain relations with the lower world, all this is the unique and great thaumaturgy of thee, the great one.' महद्देवानामसुरत्वमेकं forms the refrain of a hymn consisting of 22 ṛks (3-55). The things praised are the rise of the dawn, sunrise, Agni's parentage, his impregnating of the herbs, his leadership in sacrifice, conflagrations, Agni's various forms as he appears in the three regions, the two sisters—the black and the white, the hidden and the open (night and day), the two cows, the mother and daughter, the one even and the other awry (earth and heaven). All these are the thaumaturgy, the miracles wrought by the gods. The dawn, the sunrise, night and day, and heaven and earth, were miracles to early man.

The word Asurya derived from Asura is sometimes used as an adjective but very often as a noun. (आदित्यासः) दीर्घाधियो रक्षमाणा असुर्यं (2-27-4)—'the Ādityas of far-reaching intellect, preserving their power.' ईशानादस्य भुवनस्य भूरेर्न वा उ योषद्रुद्रादसुर्यं (2-33-9)—'never has power departed from Rudra, ruling over this large universe.' अन्यदन्यदसुर्यं वसाना नि मायिनो ममिरे रूपमस्मिन् (3-38-7)—'the thaumaturges, each one invested with his own peculiar might, created beauty in him (Indra).' त्वे असुर्यं मारुहत् (5-10-2)—'power mounted thee' (said of Agni). ता हि क्षत्रमविह्रुतं सम्यगसुर्यमाशाते (5-66-2)—'They (Mitra and Varuṇa) possess unassailable strength, excellent power.' तुभ्यमन्विन्द्र सत्रासुर्यं देवेभिर्धायि विश्वं (6-20-2)—'All power was bestowed on thee by gods, O Indra, for ever.' अधा मन्ये बृहदसुर्यमस्य यानि दाधार

नकिरा मिनाति (6-30-2)—'I consider his power to be great, for none injures what he upholds.' सत्रा मदासस्तव विश्वजन्याः सत्रा रायोऽध ये पार्थिवासः । सत्रा वाजानामभवो विभक्ता यद्देवेषु धारयथा असुर्यं (6-36-1)—'As (alone) among the gods thou holdest power, thy intoxication has proved beneficial to all, as also all earthly riches, and thou becomest the distributor of food.' सोमारुद्रा धारयेथामसुर्यं (6-74-1), त्वे असुर्यं वसवो न्यृण्वन् (7-5-6), ययोरसुर्यमक्षितं (7-65-1), अपां नपादसुर्यस्य मह्ना विश्वान्यर्यो भुवना जजान (2-35-2), अहं राजा वरुणो मह्यं तान्यसुर्याणि प्रथमा धारयन्त (4-42-2), चत्वारि ते असुर्याणि नामादाभ्यानि महिषस्य सन्ति (10-54-4), असुर्यात्पासि धर्मणा 1-134-5). In all these ṛks Asurya denotes power. या धारयन्त देवाः सुदक्षा दक्षपितरा । असुर्याय प्रमहसा (7-66-2), ता माता विश्ववेदसासुर्याय प्रमहसा । मही जजानादितिर्ऋतावरी (8-25-3) ; in these two ṛks Mitra and Varuṇa are said to have been created by the Gods or Aditi for Asurya, *i. e.* great exploits or exhibition of strength.

As an adjective Asurya occurs five times. देवाश्चित्ते असुर्याय पूर्वेऽनु क्षत्राय ममिरे सहांसि (7-21-7)—'even the ancient gods counted their strengths as coming in rear of thy Asura-like strength.' Here Asuryāya qualifies Kṣatrāya. के ते वाजायासुर्याय हिन्विरे के... पौंस्ये (10-50-3)—'who were sent for thy Asura-like wars, who for heroism?' (सरस्वती) असुर्या नदीनां (7-96-1)—'Saraswatī the mightiest of the rivers.' जोषद्यदीमसुर्या...रोदसी नृमणाः (1-167-5) –'the mighty Rodasī fond of heroes served them (the Maruts); भद्रा वो रातिः पृणतो न दक्षिणा पृथुज्रयी असुर्येव जञ्जती (1-168-7)—'Auspicious is your gift, of Maruts, like the largesse of a sacrificer who wishes to please the gods ; it has great speed like a resounding weapon (javelin) wielded by Asuras.'

Indra, besides being called Asura, is three times called Asurya. शतं वा यदसुर्य प्रति त्वा सुमित्र इत्थास्तौत् (10-105-11)—

when Sumitra praised thee a hundred ways thus, 'O son of Asura ; ' न ते गिरो अपि मृष्ये तुरस्य न सुष्टुतिमसुर्यस्य विद्वान् (7-22-5)—'knowing (how to praise), I shall never neglect or forget the praises of thee who art so quick and powerful. ' शंसात्युक्थमुशनेव वेधाश्चिकितुषे असुर्याय मन्म (4-16-2)—'the poet like Uśanas utters prayer to thee, who art powerful and conscious (of every thing).' Asurya may in all these cases mean powerful or son of Asura.

Another derivative besides Asuratva and Asurya is Āsura. We have seen how in a certain quotation Varuṇa is called Āsura. तनूनपादुच्यते गर्भ आसुरो नराशंसो भवति यद्विजायते (3-29-11)—'the Asura-fœtus is called Tanūnapāt ; when born, it is called Narāśaṁsa'. Asura may be derived from *tasyāpatyaṃ* (P 4 -1-92) or *śivādibhyoṇ* (P 4-1-112). Varuṇa, in that case, would be a son of Asura. *Garbha āsurah*, by sūtra *tasyedaṁ* (P 4-3-120) 'the fœtus belonging to Asura.' Or as Agni is the son of Asura, he may be called Asura by *tasyāpatyaṃ*.... Asura lays the fœtus in the womb and hence Agni is called Tanūnapāt—one who lies in the body (of waters.)

Asurya however is a word difficult to account for by Pāṇini's rules. *Āsurasya svam* is Paṇini's sūtra (4-4-123) for deriving Asurya. *Svamajñatidhanākhyāyām* (P 1-1-35) shows that *sva* has many senses. Does *sva* in Asurasya *svaṁ* mean wealth or has it any other meaning? स्वो ज्ञातावात्मनि स्वं त्रिष्वात्मीये स्वो स्त्रियां धने (*Amara* 3-3-210). *Sva* according to *Amara* means relatives, soul, one's own and wealth. But in the case of Asurya as used in the *Ṛgveda*, none of these senses is suitable. Asurya in most cases means power ; when adjectively used, it should mean either powerful or a son of Asura. *Svam* may have had the sense of 'power' in Pāṇini's days and Asurya may be derived by the sūtra *asurasya*

svam. But what about Asurya when it means powerful or a son of Asura? How does Pāṇini derive it?

The form Āsura meaning offspring of Asura may be derived as we have said above by *tasyāpatyam.* But for the feminine form Āsuri, Pāṇini has *Māyāyāmaṇ* (4-4-24) which means that the word Asura takes aṇ, it becomes Āsuri and means Māyā,–miracle-working power. But the form Āsuri does not occur in the *Ṛgveda* even once. In the *Taittirīya Saṃhitā* (4-1-9) we have आसुरी माया स्वधयां कृतासिं. The Ukhā (an earthen receptacle for a certain sacrificial fire) is called Āsurī Māyā *i.e.* a miracle wrought by Asura. But I have not met with Āsuri used by itself and meaning Māyā.

So far we have had instances of the use of Asura in a good sense. But at some unknown and unascertainable period an evil sense came to be attached to that word. Indra is called *asurahā* (10-170-2) and *asuraghna* (6-22-4); Asura, Amitra, Vṛtra, Sapatna and Dasyu are placed in the same category, and Indra is addressed as their killer (10-170-2). Agni too is called *asuraghna* (7-13-1). दृळ्हानि पिप्रोरसुंरस्य मायिन इन्द्रो व्यांस्यत् (10-138-3)—'Indra scattered or destroyed the strongholds of Asura who was a tactician and had extended his power.' अनायुधासो असुंरा अदेवाश्चक्रेण ताँ अपं वप ऋजीषिन् (8-96-9)—'the Asuras deny the gods and are without weapons; root them out, O Indra, fond of Soma, with the disc.' निर्मीया उ त्ये असुंरा अभूवन् (10-124-5)—'the Asuras have lost their skill,' says a king. येनासुंराँ अभि देवा असांम (10-53-4)—'whereby we-the gods, may overcome the Asuras'; हत्वायं देवा असुंरान्यदायंन्देवा देंवत्वमंभिरक्षंमाणाः (10-157-4)—'when the gods came back killing the Asuras and thus preserving their godhood.' या इंन्द्र भुज आभंरः स्वर्वाँ असुंरेभ्यः। स्तोतारमिन्मं घवन्नस्य वर्धय ये च

त्वे वृक्तबर्हिषः (8-97-1) —'prosper thy devotee, O Indra, with that wealth, which thou, possessed of light, extortedst from the Asuras.' यथा देवा असुरेषु श्रद्धामुग्रेषु चक्रिरे (10-151-3)–'as the gods reposed trust in the Asuras, though so fierce.' The inference, of course, is that the Asuras betrayed that trust. The gods who were Asuras themselves now glory in killing them, as the latter deny gods. They have lost their industrial and military skill and have no weapons. It is considered righteous to rob them of their wealth. They are considered dishonest and unfair in their dealings. Their very complexion becomes hateful. असुर्यं वर्णं नि रिणीते (9-71-2)—'Soma loses (in the process of extraction of its juice) its Asura-like colour.'

Indra, himself a mighty Asura and Asurya, is solicited to strike *asurasya vīrān* with his burning weapons as with a stone from a sling. बृहस्पते तपुषाश्नेव विध्य वृकद्वरसो असुरस्य वीरान् (2-30-4); शतं वर्चिनः सहस्रं च साकं हथो अप्रत्यसुरस्य वीरान् (7-99-5)—'You two, (Oh Indra and Viṣṇu), kill by hundreds and thousands, the sons of Asura at one and the same time, so that they should never make head again.'

Of all gods Indra is credited with the greatest slaughter, the others being mere accessories. Indra, a deva, is considered an evil genius by Zoroastrianism and is one among the miscellany of evil genii. He fills there quite a subordinate place. I would take Aingra Mainyu to be Indra's prototype, as *Manyu* is a frequent epithet of Indra. Aingra Mainyu is the adversary of Ahura Mazda. Indra, being called father of lies, avenges the insult by becoming Asuraghna. The two religions, Zoroastrianism and Ṛgvedism, came to loggerheads at some period of the world's history and took delight in reviling each other's gods. Indra, who

was an Asuravīra himself, supplanted all the previous supremacies and became supreme deity himself. He was an Asuraghna in this sense and was therefore morally and spiritually degraded into Aingra Mainyu. The name Asura became a stinkard in post-Ṛgvedic literature. In the *Ṛgveda* the Asuras are the equals of the gods and are never associated with Rakṣas and Yātudhāna, who are considered as quite despicable and detestable. Kill, kill, kill is the constant cry of the Ṛṣis with regard to Rakṣas, while no charge is considered so degrading as that of being named a sorcerer.

In the *Aitareya Brāhmaṇa*, the Devas and Asuras are called samāvadvīryāḥ *i. e.* 'of equal might' only once. In certain places they are associated with the Rākṣasas and all sorts of tactics had to be employed to prevent their interference with the sacrifice. Their religious formulas were counteracted by secret mantras and rites of the opposite character. The Asuras employed the *Ukthas* (*Ugdha* in Avesta means holy word or prayer) which the Devas counteract by certain Sāmans (*Ait. Brāh.* 15-5 and 28-6). The *Maitrāvaruṇa Uktha* is said to be a speciality of the Asuras. In the same way, they nonplussed them in their Gāthās by singing Indragāthās (ibid 30-6). Modern Zoroastrians do not know what these *Ukthas* are, though they have the word *ugdha*. The long-tongued beastly bitch licked the morning Soma-juice ; she was evidently deputed by the Asuras (*ibid.* 8-4). Svarbhānu or Rāhu, who strikes the sun with darkness, is Āsura, a whelp of Asura (5-45-5). Prayers absent-mindedly uttered are called *asurya* (ibid. 6-5). Violations of sacrificial rules are also considered as rules prevailing among Asuras. Day belongs to Gods, night to Asuras (*ibid.* 16-5) In the *Maitrāyaṇī Saṃhitā* (3-6-5) *asurya* is altered into *asūrya* to show that the Asuras

are the children of night. At milking they used an iron-vessel ; consequently they milked Surā *i. e.* liquor, instead of milk (ibid. 4-2-1). While gods addressed the cow as *Kāmye*, men by *śravye* and the manes by *Ilānde*, the Asuras called her by an unnamable name (*ibid.*) Men see things by day-light with the eyes of gods, by moon-light with those of Pitṛs, in the dark with human eyes, and near fire with those of Asuras. The Asuras thus are intimately associated with fire and shall we say with Surā ?

Very curious derivations are given of the word Asura. Says the *Maitrāyaṇī Saṃhitā* (4-2-1), 'Prajāpati, sick of loneliness, wanted to create. So he became pregnant. He became so exhausted with the burden that he turned almost black and only the breath of life remained in him. It was from this breath (*asu*) that he created Asuras, hence the name. It was daytime (*divā*) when he created Gods, hence the name Devas.' The *Nirukta* (3-8) gives a Brāhmaṇa quotation which can not be identified, thus :—सोऽदेवानसृजत तत्सुराणां सुरत्वमसोरसुरानसृजत तदसुराणामसुरत्वम्—'he created gods from an excellent part, so the name Sura ; and the Asuras from a vile part, hence the name Asura.' The Nirukta has other flights of imagination. *Asuratāḥ (sthaneṣu)*-not pleased with any locality long ; they are flighty in character. Or they were driven out (astāḥ sthānebhyaḥ) from all possible places ; or they possessed life *(Asu)*. By the way, the name Sura does not occur even once in the *Ṛgveda.* It is only in the above untraced quotation that I have come across the name. It seems to be an invention and Asura seems to have been supposed a negation of Sura. Such is the religious and literary spirit of perversion.

The Devas and Asuras must do things always in

contrary ways, as we have said above. Says the *Śatapatha Brāhmaṇa* (13-8-2-1)—the gods and Asuras, both sons of Prajāpati struggled for supremacy in this world and the gods succeeded in ousting their rival cousins. The gods have open, unenclosed cemeteries, while the Asuras have enclosed ones. The latter must hide the corpse in a tub or urn (Camū) or a similar receptacle'.

In the *Taittirīya Brāhmaṇa* (1-5-6) we have their manner of shaving. The Asuras began with the hair on their head, then came down to the face and lastly to the arm-pits. By following this downward course, they made their way to hell. But the gods began with the arm-pits, rose to the face and lastly to the head. They necessarily rose to heaven. I do not know if this was the custom of shaving in the days of Zoroaster.

In the *Taittirīya Saṃhitā* the degradation is come plete. The Devas, men and Pitṛs are ranged on one side ; Asuras, Rakṣas, and Piśācas on the other (2-4-1). In comparing Brāhmaṇas with Sūdras, the *Taittirīya Brāhmaṇa* (1-2-6) says, 'the Brāhmaṇa is divine in caste, the Śūdra is *asurya.*' In the *Atharvaveda* the degradation reaches its low-water mark. Āsurī is the name for mustard (*i.e.* 1-24-6) and was used for curing certain diseases. Certain magic charms are called Āsurī there (*ibid* 8-5-4). Bad dreams are born in Asurayoni (*ibid* 19-56-1).

The word *Manyu* which in Avesta means 'spiritual', 'invisible', means 'rage' or 'fierce' in *Ṛgveda.* So Dasyu, in Avesta Daiṁhu, means a country or its people ; in *Ṛgveda* it means 'inimical people,' enemies of the gods. Gāthā, which in Avesta is the highest, most exalted human utterance, is in the

Kāthakasaṃhitā disparaged thus:—अनृतं नाराशंसा: । यो गाथा नाराशंसीभ्यां सनोति तस्य न गृह्यं... । अनृतं हि गाथा अनृतं नाराशंसा: न गाथाभि: प्रकुर्वीत–(*ibid* 14-5)—one should not perform any sacrificial rite by (reciting) Gāthās.' न गाथाभि: प्रकुर्वीत one should not perform any sacrificial rite by (reciting) Gāthās. I have noted the quotation somewhere, but have not been able to find it. Śrauṣa is an Avestan deity, almost the right-hand of Mazda who reveals his religion to him and through him to mankind. He fightsthe demons and drives them off by the recital of certain hymns. In the Indian ritual Śrauṣaṭ is simply a cry uttered by a Indian priest, when an oblation is offered. It is intended to draw attention. In the Brāhmaṇas it is the Asuras that interfere with sacrifice and make it ineffective. But it is curious that in the *Maitrāyaṇī Saṃhitā*(1-4-3)and in the *Taittirīya Saṃhitā* (3·5-4) we have ये देवा यज्ञहन: and ये देवा यज्ञमुष: अग्निस्तेभ्यो न रक्षतु । The Aryan gods are beneficent powers. How can they destroy the sacrifice or steal it ? Is this an interpolation from Zoroastrianism, or a reminiscence of the times when the Aryans lived in the neighbourhood of the Zoroastrians ?

I have not dwelt on all the struggles between the Devas and Asuras, which form such a large part of the Brāhmaṇas. They would require an essay by themselves and perhaps would give very useful information.

As far as the present treatment goes, I think the following conclusions may be drawn :—

1. Asura at one time was the supreme deity of many nations—at least of the Vedic Aryans, Chaldeans and Zoroastrians.
2. His other names were, perhaps, Dyau, Mahas and Amṛta.
3. The question as to who borrowed from whom can never be answered. There is such a close resemblance between Asura Mahas and Assar

Mazaash and Ahur Mazda, that the three nations must have been neighbours.

4. In the Avesta, Āthro or fire is called the son of Ahura and certain female deities his daughters. In the Ṛgveda almost all the gods are the sons of Asura. Hence Asura came to be a patronymic and had a generic sense. In some cases the epithet was significant, as for instance in the case of Indra, Varuṇa and Mitra. The *Encyclopædia of Religion and Ethics* is wrong in saying, that Asura means God. It is an adjective and an epithet of gods and means powerful. It is used as a comparative and superlative.
5. Varuṇa was not the supreme Asura in the *Ṛgveda* as he is called Āsura and Asura-putra. The writer on the article Ormazd thinks that Varuṇa was the Vedic prototype of Ahura on account of the moral and intellectual resemblance between them. Pracetas is however used equally in the case of Indra (8-90-6) Bṛhaspati (2-23-2), and Savitṛ (4-53-1). Asura employed all the gods including Varuṇa to supervise human affairs and gave special powers to Varuṇa as the latter's moral and punitive nature appears emphasized in so many places.
6. Asura, Asuratva and Asurya had for a long time a desirable connotation. As kings like Haoshravah were called Ahura, so were Indian kings. Asuratva and Asurya meant thaumaturgy, the power of working miracles.
7. There is an overwhelming majority of instances in which the word Asura is used in a

good sense, the bad instances being in a minority of about 15 *i.e.* about $\frac{1}{7}$ of the whole (105). This shows that the cleavage between the Ṛgvedic religion and Zoroastrianism happened towards the end of the Ṛgvedic period. The enmity became bitter and bitterer in post-Ṛgvedic times. There was as it were a partition of deities and it came to be the special duty of the priestly class to exalt the deities of its own adoption and vilify those of the enemies. Words like Manyu, Gāthā, Dasyu, Kavi were given a fair or foul meaning according to the prejudices and prepossessions. Aśa which occurs only once in the *Ṛgveda* (1-173-4) and that too as an adjective in the comparative degree, is given an unrivalled prominence in Zoroastrianism. Asura and Deva, once denoting all that is spiritually good and divine, were construed by the opposite camps into monsters of the vilest characters. No abuse was too bad. The two races adopted contrary customs in burial, shaving, and even in marriage, if we interpret Khetukdash according to European savants, the Indian Aryans insisting on marriage out of family-relations, the other side advocating marriage even with a sister or a daughter.

THE PHILOLOGICAL ARGUMENT FOR AN UPPER LIMIT TO THE DATE OF THE ṚGVEDA

By A. C. Woolner

This paper does not pretend to fix the date of the *Ṛgveda*. No attempt will be made to review such slender historical evidence as has been gleaned so far from the records of Mesopotamia, as to the arrival of the Medes and of the Horse. I shall not discuss the presence of Aryan names in a Mitanni record of the 14th century, B. C., or the possibility of an Aryan influence in the heresy of the Egyptian Akhnaten a century later. Nor again do I propose to discuss the internal evidence, whether of generations of Kings, or of the whole history of Vedic religion before Gautama Buddha.

While alluding to these matters, however, I venture to emphasise the need of resisting a definite *bias* one way or the other. It will be admitted that many people when discussing Indian dates have a distinct preference for the earliest possible date, simply because it is more remote. On the other hand I think some scholars have shown a strong bias towards the latest possible dates, simply because they are nearer to dated events; in other words they always lean towards the lower limit and tend to regard any date beyond 1,000 B. C. as inherently improbable, unless supported by a dated inscription.

This difference of attitude has been so marked in this question of the date of the *Ṛgveda*, that it may

not seem a mere platitude to insist on the need of unbiassed judgment.

The aspect of the question with which this paper is concerned is the philological evidence for fixing an upper limit for the earliest hymn (whichever it is) of the *Ṛgveda*.

The argument has been stated by Prof. Macdonell in his *History of Sanskrit Literature* (p. 12) and more recently in the Hastings *Encyclopædia* (s. v. Hymns, Vedic).

The two wings of the argument are :—

(1) That a comparison of the language of the Avesta with that of the *Ṛgveda* proves that the Aryans could not have entered the North West of India much before 1,300 B. C., and therefore, (granting that the hymns were composed afterwards,) no Vedic hymn is much older than 1,300 B. C.

(2) Assuming that the Brāhmaṇa period begins somewhere about 800 B. C., three, or at the most, five centuries are 'amply sufficient' for the changes which the hymn literature reveals ; hence, by implication, any Vedic hymn older than about 1,300 B. C. is highly improbable.

Taking the second part of the argument first, it should be noted that it is not purely philological.

In his *History* Prof. Macdonell, following Max Müller, an early philologist, wrote : –" A lapse of three centuries, say from 1,300–1,000 B. C., would amply account for the difference between what is oldest and newest in Vedic hymn-poetry" and speaks of "A development of language and thought hardly greater than that between the Homeric and the Attic age of

Greece". In the Hastings *Encyclopædia* he says :—
" To allow for all this gradual development it is necessary to postulate a period of some centuries, decidedly longer, for example than that between Homeric and Classical Greek..........Five Hundred years are amply sufficient to account for the gradual changes, linguistic, social, and political that this hymn literature reveals".

Of the comparison with Greek I shall say something later, but we may note here that this estimate does not claim to be precise, that it depends not merely on language but also on an estimate as to how fast social and political changes were likely to take place, and finally that the wording really indicates a lower limit (the lowest possible or the lowest probable) which is regarded as being fairly near the earliest probable date. Estimates as to the probable pace of social and political changes in Ancient India will vary, and there is the further difficulty that there is no fixed point before Gautama Buddha from which to reckon back. Prof. Macdonell says " Since that (Theological and Theosophical literature) is extensive, it cannot be assumed to have begun later than about 800 B. C." Again the lower limit.

We may compare the chronology of the *Aitareya Āraṇyaka* with it's Upaniṣads as worked out by Professor Keith (p. 49. p. 73). He argues from work to work, taking the lower limit in each case: " Pāṇini, who cannot well be dated later than 300 B. C. ;" "Yāska, who can hardly be brought down lower than 550–500 B. C. ;" "Yāska cannot well be later than 500 B. C." and so on.

This is a perfectly legitimate method of arriving at a lower limit for the older books : obviously it does

not give an upper limit at all. Even so Professor Keith will go back as far as 700–600 B. C. for the second Āraṇyaka, and he admits " The upper date may perhaps be pushed further back ". At this point he seems to have felt a qualm of orthodoxy; " but this involves the pushing back of the date of the *Ṛgveda*, for which, at least at present, no satisfactory evidence has been adduced ". If to so conservative a scholar as Prof. Keith, his profound knowledge and patient analysis of Brahmanic literature suggest the possibility of pushing back the date of the *Ṛgveda*, and yet he refrains from this in the absence of satisfactory evidence, what is the nature of the evidence for fixing the dates of the *Ṛgveda* so low?

The answer is contained in the first wing of the argument, with which I am mainly concerned. Professor Macdonell writes in the Hastings *Encyclopædia* " *If the language of the Avesta were known to us at a stage earlier by six or seven centuries, it could hardly differ at all from that of the Vedic Hymns.* " " It therefore seems impossible to avoid the conclusion that the Indians cannot have separated from the Iranians much earlier than about 1,300 B. C. "

The study of this argument will involve us in some difficulties, and perhaps some doubts.

To start with, it is interesting to note that the comparison of the Avestan Gāthās with the Vedic hymns was first adduced (as by Geldner, *Encyclop. Britt.*, 11th edn., s. v. Persia) to prove " the extreme age of the Gāthās " and then adapted to disprove " the possibility of extreme antiquity " of the *Ṛgveda*. Geldner was arguing against the possibility of a Sassanian date for the text of the Avesta. He showed that there was development; the Gāthās were more

archaic than "the later Zend" and he stated that they had "a close resemblance to the language of the Vedas exceeding that of any two Romance languages: they seem hardly more than two dialects of one tongue. Whole strophes of the Gāthās can be turned into good old Sanskrit by the application of certain phonetic laws:" and he gives an example. Prof. Macdonell gives this in a stronger form. "By the mere application of phonetic laws, whole Avestan stanzas may be translated word for word into Vedic, so as to produce verses correct not only in form but in poetic spirit."

If however, one takes Gāthās at random this sort of transliteration process does not seem very easy. Professor Jackson writes:—"Because of this close correspondence, *many Avestan words and phrases* may be changed at once into their Sanskrit equivalents by the mere application of certain phonetic laws." That is a very different story, and I venture to think, more exact.

We may suspect then that though his conclusion was sound, Geldner exaggerated the similarity of the two languages.

Another difficulty, though not so serious, is the absence of definite dated starting points on either the Indian or the Iranian side of the argument. Prof. Jackson quotes as the generally accepted view that the Gāthās date back to an early period of the religion, if not to the prophet Zoroaster himself, and he gives as the extreme limits of the period of development about B. C. 560 and A. D. 375.

Macdonell takes the estimated date of the 6th century as his starting point. This may very likely be correct, quite apart from any doubt there may be about the date of Zoroaster. At the same time the

question suggests itself, why should not the philological comparison start from the dated inscription of Darius the Great in Old Persian? Is it impossible to estimate the difference in time between Old Persian and Vedic? Or again why not compare Darius' inscriptions of about 500 B. C. with those of Aśoka about 250 B. C.?

This question brings us to the root of the matter. How and to what extent can we estimate dates by comparing similar languages? That languages are continually changing is the primary fact from which philology starts. But it is soon obvious that they do not all change at a uniform rate. Icelandic has not changed so rapidly as English; Singhalese has travelled further from its original Indian source than Hindi has done. Is it not true that at certain periods of their history languages have changed faster than at others? When an old system of grammar is breaking down and being replaced by new methods, is not change likely to be more rapid than in the periods before and after? Is it not reasonable to expect that a period of fresh contact with new peoples will show more changes in pronunciation and vocabulary than a period of unruffled calm? May not both movement and stagnation be reflected in the growth of language?

If pace does vary under such circumstances, it is obvious that we cannot have a minute calculus,—of so much change means so much time,—though investigation might indicate the limits to be expected in varying circumstances. If however we take a wider sweep of time like six or seven centuries it may be claimed that the total change must have aggregated at least so much. The only method of investigating the question lies in observing how much change has taken place between known dates in many languages.

The argument we are discussing has in fact been content with two or three parallels.

One parallel is that of Greek from Homer to Plato. It is unfortunate that Homer is not definitely dated, and even if we accept the 9th century for the poet, he is held to have "dealt freely with the dialect of the old Achæan poems," (Bury, *History of Greece* p. 66). That means that the language of the Homeric poems is more archaic than the ordinary Ionian dialects of the ninth century. Attic is not only later, but is also a different dialect of the Ionian group. The geographical conditions of Hellas were particularly conducive to the growth and maintenance of many separate dialects (Giles. *Manual of Comparative Philology* p. 525). Moreover the period in question witnessed the expansion of Greece, the growth of Athens, and the conflict with Persia. These conditions are very different to those of the Aryans in Gāndhāra and Iran.

The changes of literary Greek from those Attic days down to the newspaper of to-day have been less rapid, especially if "mere" phonetic changes are discounted.

Another suggested parallel is between the Europeanising of America and the Aryanising of India. The differences in the conditions are here so obvious that it is difficult to regard it as really relevant. We may note that in India the process, though it still goes on after at least 3,200 years, is less complete than that in America; also that four centuries have not made a great difference in the European languages spoken in America.

If we glance now at other possible parallels we can find instances of apparent stability during long periods. In Egypt, as the records are rendered, the

lapse of a thousand years seems to make little or no difference to the language or the style. In the Assyrian records the language of the great King Sargon appears to be much the same as that of Nebuchadnezzar about two thousand years later. In Chinese again, apart from "mere" phonetic decay, it will be admitted that the language has changed extremely slowly during the last two thousand years.

To these examples the objection may be taken that they really represent stability of script, and that we do not know how much phonetic change may underlie the writing. Or with greater force it may be said, these are fixed stereotyped literary or priestly forms of language, not the untrammelled folk-speech which the philologist should study, and which we should assume for the early Aryans.

We may admit that the language of the hymns was not a written language. When and how the Gāthās were first written down we do not know. Old Persian appears at the end of the 6th century B. C., in a script that had been adapted from Assyrian cuneiform, and had presumably been in use some time before it was used for a royal document. As to pronunciation we should remember that the sounds of the letters in which the Gāthās and Old Persian are recorded have been deduced from the sounds used in later ages, and by comparison with Sanskrit. The sounds of the Veda are deduced from the oral tradition still existing, the directions of the Prātiśākhyas, the treatment of sounds in *sandhi* and so on. Now suppose these deductions to be absolutely accurate for the end of the period (*i.e.* for the century in which the latest hymns were composed) can they also be absolutely accurate for the beginning of the period (*i.e.* for the century in which the earliest *mantra* was composed)?

Either we must admit the probability of some amount of phonetic change that has not been recorded, or else we must assume several centuries at least of remarkable stability of pronunciation. A high degree of stability is not impossible, if the importance of correct oral transmission was recognised during the Vedic period itself. But the same oral tradition could also preserve the structure and vocabulary of a poetic dialect from rapid change. The hymns are not simple folk-poetry in contemporary colloquial idiom.

On the other side we know nothing, I believe, about the pre-Zoroastrian ancestors of the speakers of the Avestan language, except that they must have inherited some of the elements which are assigned to the Indo-Iranian period: including, as Professor Macdonell notes (p. 68), a religious hymn-poetry with stanzas of four eleven syllable, and of four or three eight syllable lines.

In other words Zoroaster's ancestors had a literary tradition, and very probably a poetic dialect which would tend to check rapid change.

I do not wish to exaggerate this argument, or maintain that either Vedic or the Old Iranian poetry was out of all relation to the ordinary spoken languages of N. W. India and Iran, but I do claim that the poetic dialect could remain more stable than the folk dialects, and that that fact has to be considered in any calculation.

I have reserved to the last the parallel of the Romance languages, though it was the first suggested by Geldner. Here we have the advantages of a great abundance of dated documents, and the history of the countries is known from other sources.

I have endeavoured to check the statement that

the Avesta is nearer to the Veda than any two Romance languages to each other. I will not enter into details here, but I must confess myself still unconvinced of its accuracy.

Brief mention may be made of an experimental attempt to find some numerical formula to express the relationship of Spanish and Italian. The most instructive points about that experiment are to be found, I think, in the difficulties encountered.

The very first question is, on how much, and on what sort of material should such an enquiry be based. The texts chosen with an eye to the Aryan parallel were the Spanish and Italian versions of the Psalms. Here are two documents in related languages derived in historical times from a common source. Can we correlate their relation to one another with the length of time since they diverged, and, in particular, estimate when the Romans colonised Spain?

The initial difficulty is to decide what sort of difference should be counted in. We cannot ignore mere phonetic changes, for some of these affect the development of the grammar. We cannot simply count the percentage of words common to both vocabularies, for though the Spanish version uses another word, there may be a word in Spanish which exactly corresponds to that used in the Italian version. To merely compare the grammars may exaggerate the importance of more unusual words. As a compromise (necessarily arbitrary) one may estimate for a given text the percentages of

(a) Words common to the two versions that are identical in form;

(b) Nearly identical but with slight phonetic change;

(*c*) Equivalent but more changed, as "*figlio*" and "*hijo.*"

(*d*) Different words which can be replaced by equivalents, (*i*) nearly identical or (*ii*) much changed;

(*e*) Different words that cannot be so replaced, as "*fratre*" and "*hermano.*"

Suppose now that we have estimated the percentages of these six classes of words in our text, we should have a rough but numerical formula expressing the degree of resemblance between the languages of the two versions. Now how is such a result to be correlated with chronology? We shall at once wish to know whether the changes that have produced these differences have been continuous or whether they have come with a rush at certain times. Glancing at the history of Spanish we shall want to know whether the original contact with the Iberians (in the 2nd century B. C.) has influenced the language as much as, or less than, the occupation by the Visigoths in the 6th century A. D., or the contact with Arabic from the eighth to the thirteenth century. These questions can only be alluded to here. But it might turn out that for the first five centuries of the Roman occupation of Spain the language of the colonists remained essentially Latin (not all literary, but for colloquial purposes the average Low Latin of the Roman army) and that most of the changes came after that. If so, then any calculation as to how far back the languages would coincide, based on the assumption of a definite cleavage starting from the first invasion of Spain by the Romans, would be five centuries wrong.

Of course an obvious factor tending to retard the separate development of a Spanish language during the

first seven centuries was the continued contact with Rome and Latin.

Returning now to our special problem. The same method of calculation can be applied. I cannot claim to have carried this far enough to obtain results that are worth quoting. I am not prepared to prove my suspicion that the Avesta would show a wider degree of difference from the *Ṛgveda* than Spanish from Italian ; but let us assume that the difference is of the same order of magnitude.

What then should we conclude as regards chronology ?

The upper limit for these Romance translations is about 1400 ; later versions date about 1550. So we may equate about 1500 A. D. with about 500 B. C. for the Avesta.

Going back eight centuries we get to 1300 B. C., the supposed upper limit of the separation of the two branches of the Aryans, and to 700 A. D. for Roman colonization of Spain,—which is manifestly absurd—about nine centuries out !

On the other hand if we apply the parallel of about seventeen centuries from the Romance to the Aryan languages, we get to about B. C. 2200.

To avoid this result it would be necessary either to show that the difference between Avestan and Vedic was much less than between Castilian and Italian about 1500, (which I think is not the case), or else to argue that the circumstances were different and that the Indo-Iranian languages must have diverged more rapidly.

This latter course would mean that the argument was not purely philological, but was combined with certain assumptions, which may or may not be

justified, as to the previous history of the Aryans. We have been in the way of assuming that once upon a time the Indo-Iranians split up into two divisions of which one forthwith became Iranian and the other Indian ; after which they lost contact with each other, and each developed separately after its own kind.

Perhaps it was so. But in the absence of evidence, there remains the possibility that the separation was more gradual, and that contact was not broken the moment that the dialects began to diverge in the West and East. Even when contact was broken, the common inheritance of religious hymn-poetry would probably remain the most stable element in the languages on either side. Such a parallel development of a conservative literary tradition does not seem impossible. (We only know the Avestan language after Zoroaster's revolution). In any case philology cannot disprove its possibility.

Now I will sum up the general conclusions of my whole argument as follows :—

i. Any attempt to fix chronological limits on the basis of comparing languages should be based on a more exact numerical comparison of dated documents than has been attempted hitherto. The conditions under which languages change more or less rapidly must be investigated. This opens up new lines of investigation.

If it be objected that linguistic change cannot be treated statistically, then grave doubt must attach to any numerical estimates based on general impressions.

ii. Our attempts to come to grips with this particular argument suggest a further conclusion, which may be regarded as heretical. It is that while history known from other sources

can be traced in the history of language, it is much more precarious to reconstruct history on a basis of comparative philology alone.

iii. In particular it seems that as far as any *philological* estimates go, 2000 B. C. remains quite as possible as 1200 B. C. for the earliest Mantra. Possibly more exact comparison may succeed in establishing the probability of a lower date, but I contend that this has not yet been done.

Perhaps it may be asked—is there then no limit? Can we equally well go back to 3000 or even 4000 B.C.? The answer to this is, I think, that no direct proof has been obtained from the philological data taken by themselves without any assumption as to historical conditions and the nature of the tradition. On the other hand, if an accurate comparison should show that these remoter dates would involve a degree of stability in a literary language twice as great as that recorded anywhere else in the world, philologists may reasonably demand strong confirmation from archæology.

And *if* again, on any reasonable assumption as to conditions, the remoter dates should indicate a degree of stability in folk-speech ten times or even five times as great as anything found elsewhere, the philologist will not be able to regard such a date as even faintly probable.

I imagine however that it is doubtful whether anyone would now propose so remote a date as 4000 B. C. for the *actual text* of any hymn, or for the Aryan settlements in the Punjab. The highest possible date for the Vedic deities, and of many elements of Vedic culture, not to speak of possible reminiscences of older periods, is a very different matter. Some of the strands in the web are admitted to be Indo-Iranian and some may even belong to the Indo-European period.

GOTRA AND PRAVARA

By C. V. Vaidya

I was led to study this subject on account of the question whether the Rajputs (Kṣatriyas) have any *gotra* of their own ; or whether it is a fact, as stated by Vijñāneśvara, in his commentary on Yajñyavalkya's line असमानार्षऽगोत्रजाम्, that they have to employ the gotras of their Purohitas, having no gotras of their own. I have come to the conclusion that this is a wrong view and a later view. This subject apart, I may state here what I have found in my study about the origin and nature of gotras and pravaras.

The modern orthodox Hindu idea of gotra is that it is the name of the Ṛṣi or ancestor in whose line one is born, the ancestor being a son or descendant of one of the seven great Ṛṣis (the Saptarśis) and the eighth Agastya सप्तानां सप्तर्षीणामगस्त्याष्टमानां यदपत्यं तद्गोत्रमित्याचक्षते । Thus it is believed that the original Indo-Aryan families were eight, viz. 1 Viśvāmitra, 2 Jamadagni, 3 Bharadvāja, 4 Gautama, 5 Atri, 6 Vaśiṣṭha, 7 Kaśyapa, and 8 Agastya. But a very curious but important śloka in the *Mahābhārata* states that originally the gotras were four only, viz. 1 Bhṛgu, 2 Vaśiṣṭha, 3 Kaśyapa, and 4 Aṅgiras. This and the next śloka are as follows :—मूलगोत्राणि चत्वारि समुत्पन्नानि भारत । अङ्गिराः कश्यपश्चैव वसिष्ठो भृगुरेव च ॥ कर्मतोऽन्यानि गोत्राणि समुत्पन्नानि पार्थिव । नामधेयानि तपसा तानिच ग्रहजं सताम् ॥ (शान्तिपर्व, अध्याय २९६) This means historically that there were originally four great stocks of Aryan families and that subsequently they were counted as eight. Looking into the later eight names and the ancient four, we find that Kaśyapa

and Vaśiṣṭha remain, but Bhṛgu is substituted by his son Jamadagni, Aṅgiras is substituted by his two sons or grandsons Bharadvāja and Gautama, and three are entire new additions, viz. Viśvāmitra, Atri, and Agastya. Possibly these were newly-arrived Aryan families, but that they must have come in Vedic times is clear, for all these three are well-known Vedic Ṛṣis or composers of Vedic hymns.

It is really strange to see that the *Mahābhārata* of 300 B. C. still retains the tradition that the original Aryan families were four, in spite of the fact that all the Śrauta Sūtras give the original family Ṛṣis as eight. The line कर्मतोऽन्यानि गोत्राणि समुत्पन्नानि पार्थिव is rather difficult of explanation. The commentator Nīlakaṇṭha says " कर्मतोऽन्यानि गोत्राणि विश्वामित्रमासीद्यादिदं किञ्च तस्माद्विश्वामित्र इत्याचक्षते एतमेव सन्त इत्यादि श्रुतेः कर्मजान्येव सर्वाणि गोत्राणि" We have the Paurāṇika story here that Viśvāmitra became a Brahmin by his acts. But we know nothing about Atri and Agastya is said to be a son of Mitrāvaruṇa, *i. e.* in a sense a brother of Vaśiṣṭha. But this is a later legend; as also the legend that Viśvāmitra was a king of the Lunar line born from a scion sprung from Atri. This descent of Viśvāmitra is a palpably concocted later theory. The line of Viśvāmitra is a dubious line, which claims to be sometimes Solar and at other times Lunar. I believe that there were more lines than two among the Kṣatriyas and Viśvāmitra's line was entirely distinct from the Solar and the Lunar lines. Whatever this may be, we may be sure that there were originally four great Aryan families which came into India and that three other families came in subsequently; the old Aṅgiras being sub-divided into two. This gives us eight families or gotra-stocks. But the modern gotras are innumerable; in fact Baudhāyana says they can be counted by

thousands (गोत्राणां च सहस्राणि प्रयुतान्यर्बुदानि च ।) How is this to be explained? Here comes in the Sūtra of Pāṇini (गोत्रं पौत्रप्रभृत्यपत्यम्) explaining the generally used word gotra or *gota* as it is used in modern Indian languages. Gotra in this sense means the descendants from the grandson onwards of any well-known man. In the families of the eight Ṛṣis were born many men of note who by their great renown gave their names to their descendants. This sort of thing is still to be seen among Rajputs, which gives rise to clans named after famous ancestors such as the Chandavats from Chand and so on. I suppose the next line " नामधेयानि तपसा " of the *Mahābhārata* śloka may be interpreted in this way, though it is rather enigmatic. New names arise owing to austerity or renown and thus the number of gotras or gots goes on increasing.

The connection between gotra and marriage-restriction easily arises, when consanguinous marriages come to be prohibited in each nation. The Indo-Aryan notion about consanguinity became very fine in very ancient times and the knowledge of each person that he was born in a particular family, insisted upon in the performance of sacrificial rites, was useful for this. Persons born in the same family or gotra of course could not marry; but this prohibition soon went further as the Aryans of India always remembered that they were born of one or other of the great eight Vedic Ṛṣis. Here was evolved the law of pravara-prohibition which was also based on certain restrictions or necessities of sacrificial rites.

Now what is pravara? The study of various Śrauta Sūtras in this connection has led me to formulate what is pravara and to trace the history of the descent of certain Aryan families. It has even suggested to me

that the priority of the different Śrauta Sūtras may be determined in view of the fact that the pravara-law enunciated by them gradually became rigid.

The theory of pravara according to all Śrauta-Sūtra writers is the same. It is based on the requirements of sacrifice. The Yajamāna or sacrifice-holder must choose the Hotā and the Adhvaryu of the same pravara as himself, and invoke fire in the name of the same ancestors. Thus Āpastamba who appears to be the eldest Sūtrakāra, says first in his Pravarādhyāya आर्षेयं वृणीते. The word आर्षेय is difficult to interprete but I think Pundit C. Gulleri of Ajmer was correct when he told me that he looked upon आर्षेय as an adjective qualifying अग्नि understood.

That means that the sacrificer calls upon the fire by the name of his Ṛṣi. The commentator suggests two meanings, the second being the one given above. "आर्षेयमृष्यपत्यसंबन्धं प्रार्थयते संकीर्तयति । अथवा आर्षेयमृष्यपत्यमग्निं यजमानस्य ऋषिसन्तानत्वात् । तं वृणीते प्रार्थयते होत्रादिभिरिति ।

It seems that in the Ṛgvedic times fires were known by the name of certain Ṛṣis and kings, for even the Ṛgvedic hymns mention आनव, साञ्जय, and other fires. The significance of this I shall discuss at another time. The *Sāṅkhyāyana Śrauta-Sūtra* cites the Ṛk अग्ने ब्रह्म महाँ असि ब्राह्मण भारत in this connection and in this way looks upon Agni as a Brahmin, a Bhārata (Indo-Aryan) and a Ṛṣi. The sacrificer therefore praises fire as his own ancestor and prays him to look upon him the descendant as the ancestor himself. The pravaras are to contain all the Ṛṣis in one's ancestry, *i. e.* those who are the composers of Ṛgvedic hymns. Āpastamba gives the further sūtra त्रीन् वृणीते मन्त्रकृतो वृणीते यथर्षिमन्त्रकृतो वृणीते इति विज्ञायते—'He praises three Ṛṣis, those who composed mantras'. The word मन्त्रकृतो is very important. The Sūtrakāra does not yet look upon the mantras

as eternal and Not-Made. The pravara Ṛṣis are therefore those Ṛṣis in one's ancestry who composed Vedic hymns. There may be many and there may be only one or two. The next rule given is therefore अथैकेषामेकं वृणीते द्वौ वृणीते त्रीन् वृणीते न चतुरो वृणीते न पञ्चाति वृणीते इति विज्ञायते ॥ ८ ॥ This means that the sacrificer should call upon one, two, three, never four nor more than five Ṛṣis. The reason of this is not given. Possibly it may be that sacrificial fires were one, two, three, never four nor more than five (पञ्चाग्नयो ये च त्रिणाचिकेताः). Hence the pravara Ṛṣis are one, two, three or five. The method of reciting the Ṛṣis is different for the Hotā and for the Adhvaryu according to all Sūtrakāras.

The Adhvaryu goes backwards from the descendant to the ancestor, while the Hotā recites forward from the ancestor to the descendant *e. g.* भार्गवच्यावनाप्नवानौर्वजामदग्न्येति होता जमदग्निवदूर्ववदप्नवानवच्च्यवनवद्भृगुवदित्यध्वर्युः । The formula for the latter adds invariably the suffix वत् which means probably, as stated above, that the fire is requested to look upon the sacrificer like जमदग्नि who praised him in Vedic times or like his father ऊर्व or his grand-father अप्नवान or his great grand-father च्यवन or his father भृगु. This direction makes it certain that the Ṛṣis recited in Pravaroccāra are related as ancestors or descendants, and we know thus even the order of descent. These facts are very interesting as showing that the Indo-Aryans have kept up the memory of their descent from Vedic Ṛṣis through all these thousands of years, at least through three thousand years, the probable date of the composition of some of these Sūtras. I have tried to ascertain whether as a matter of fact the Ṛṣis mentioned in the pravaras have really left hymns composed by them in the Ṛgveda. So far as it was possible

to ascertain, the fact is correct. I am however looking over the सर्वानुक्रमणी to examine this question most carefully. But I have at this stage no doubt that the pravaras do contain the names of *mantrakṛt* Ṛṣis in the ancestry of Indo-Aryans.

If we scan the list of pravaras in detail we shall be able to deduce some further interesting historical facts. First the word Ṛṣi means a Ṛṣi mentioned in pravara which again means that he is the composer of a Vedic hymn. In later Sanskrit the word Ṛṣi is often loosely used. In the Dharma Śāstra however, Ṛṣi means pravara-Ṛṣi and Ārṣeya or Ārṣa means pravara itself, see the line असमानार्षगोत्रजाम् of Yājñyavalkya. Secondly of these Ṛṣis Bhṛgu was the foremost. In all pravarādhyāyas the pravara enumeration begins with Bhṛgu. Thus Āpastamba says भृगूणामेवाग्रे व्याख्यास्यामः। We can thus understand the line महर्षीणां भृगुरहम् in the Bhagavadgītā. Śrī Krisṇa identified himself with Bhṛgu among Maharṣis. He stands first in the list of Ṛṣis, as Mārgaśīrṣa stands first in the list of months and Kusumākara of seasons.

Thirdly the reminiscence in the *Mahābhārata* that formerly there were four great family-stocks only, Bhṛgu and Aṅgiras, Vaśiṣṭha and Kaśyapa, is still traceable in the Sūtras, which, though they describe gotra-Ṛṣis as descendants of the Saptarṣis and Agastya, still begin with the Bhṛgu gaṇa (a name not included in the Saptarṣis). The Bhṛgu gaṇa and the Aṅgiras gaṇa are the most important and these are names not of Saptarṣis but of the ancestors of some of them. In the pravara of these two gaṇas are found names of Kṣatriya kings born in the line of the Sun and the Moon. That these names are the names of some of the Lunar kings given in the Pañcāla and Kuru lines

is almost certain, for the names of fathers and grand-fathers and even great-grand-fathers coincide. Some kings born in the Solar line are also mentioned. What does this mean? Two inferences appear to be certainly deducible. First that this pravara system is not prescribed for Brahmins only, but for all the three Aryan varṇas, Brahmins, Kṣatriyas and Vaiśyas. At any rate, as I will show further on, this system in the Sūtra times was fully in vogue among Brahmins and Kṣatriyas and secondly it appears clear that certain Kṣatriyas became Brahmins and attached themselves to the gotra and pravara of their teachers or Ācāryas. I will discuss these two points in detail and speak of the latter first.

The clearest case is of Devāpi elder brother of Śantanu. He was a Kṣatriya but gave up his kingdom and went to the forest for Tapas. He is called Ārṣṭiṣeṇa, because he joined that family of Brahmins. This family is in the Bhṛgu gaṇa and is clearly a Brahmin family, the pravara being भार्गवच्यावनाप्नवानार्ष्टिषेणानूपेति। That he was originally a Kuru Kṣatriya is also clear and well-known, for the Bṛhaddevatā gives his history आर्ष्टिषेणश्च देवापिः कौरव्यश्चैव शंतनुः । भ्रातरौ राजपुत्रौ च कौरवेषु बभूवतुः Similar is the case of Garga. He was a son of Bhumanyu son of Vitatha, son of Bharata, son of Duṣyanta. This Garga became a Brahmin and attached himself to the Bhāradvāja family of Brahmins. Thus the *Vāyu Purāṇa* says दायादाश्चापि गर्गस्य शिनिबद्धा बभूवह। स्मृताश्चैते ततो गार्ग्या क्षत्रापेता द्विजातयः १६१ अ. ९९.

The pravara given of the Gargas coincides with this Puraṇic account. Thus Āpastamba अथ गर्गाणां त्र्यार्षेयः आङ्गिरस-गार्ग्य-शैन्येति । शिनिवद्गर्गवदङ्गिरोवत् । भरद्वाजमु हैके आङ्गिरसः स्थाने । Āśvalāyana gives गर्गाणामाङ्गिरसबार्हस्पत्यभारद्वाजगार्ग्यशैन्येति। आङ्गिरसशैन्य-गार्ग्येति वा ।

Exactly similar is the case of the Kaṇvas. Kaṇva was born in the Lunar line of Puru. His son was Medhātithi and from him were born the Kaṇvas. Thus Kaṇva was a near ancestor of Duṣyanta and hence is explained how Kaṇva lived in the forest of Duyṣanta's kingdom. The Puraṇic account is corroborated by the pravara of Kaṇva. Says Āśvalāyana कण्वानामाङ्गिरसाजमीडकाण्वेति । घोरसु हैके ब्रुवतेऽवकृष्याजमीडमाङ्गिरसघोरकाण्वेति । *i. e.* One Kaṇva is in the line of Ajamīḍha mentioned in the *Ṛgveda.* In these cases as Mr. Pargiter has properly inferred in JRAS 1918 on the Pañcāla Dynasty) Kṣatriyas who became Brahmins were incorporated into families of Brahmins either in the Ācārya gotra or by adoption and were not allowed to start a new line like Viśvāmitra.

But there are other Kṣatriyas whose names are mentioned in the pravara lists and who are not known to have become Brahmins. The only explanation of this is that the pravara lists are not intended for Brahmins only but also for Kṣatriyas and Vaiśyas even. It seems that Vaiśyas lost touch with gotra and pravara even in Sūtra times. But that the Kṣatriyas, like the Brahmins, kept their gotra and pravara memories always fresh, is certain from the following discussion quoted by *Pravara-manjarī* from Kātyāyana अपि हैके मानवेति मनुवदित्येकैकं सार्ववर्णिकं प्रवृणीते। कस्य हेतोरिति मानव्या हि प्रजा इति । तदेतन्नोपपद्यते न देवैर्न मनुष्यैरार्षेयं प्रवृणीते । तदेतदन्यत्र ब्राह्मणक्षत्रियाभ्यामितरासां प्रजानामुक्तं भवति । 'Some Ācāryas say that only one pravara should be recited, viz. Manu. But that is not correct ; for it is ordained that pravara should not relate to gods nor to men but to Ṛṣis only. Therefore that opinion should be held applicable to others than Brahmins and Kṣatriyas.'

I will give particular instances of such names as

are names of undoubted Kṣatriyas. The most noted are Māndhātā, Ambarīṣa, Yuvanāśva. They are mentioned in the Angiras group. Says Āpastamba अथ हरितानां श्यार्षेयः आङ्गिरसाम्बरीषयौवनाश्वेति । मान्धातारमुहैकेऽङ्गिरसः स्थाने मान्धात्राम्बरीषयौवनाश्वेति । This is a very interesting pravara, for it cuts off even the connection with Aṅgiras. The three Ṛṣis or rather Rājarṣis are in the ascending order Yuvanāśva, Ambarīṣa and Māndhātā. These are not only undoubted Kṣatriyas but are also composers of Vedic hymns (9th Maṇḍala, see *Sarvānukramaṇī*) and therefore Rājarṣis. Now the *Vāyu Purāṇa* refers to this line and pravara, when it says (chapter 88) " तस्यामुत्पादयामास मान्धाता त्रीन् सुतान् प्रभुः। पुरुकुत्समम्बरीषं मुचुकुन्दं च विश्रुतम् । अम्बरीषस्य दायादो युवनाश्वोऽपरः स्मृतः । हरितो युवनाश्वस्य हारिताः शूरयः स्मृताः । एतेऽह्यङ्गिरसः पुत्राः क्षात्रोपेता द्विजातयः ॥ ७३ ॥

Here we have the same line as given by the pravara, viz. Harīta, Yuvanāśva, Ambarīṣa and Māndhātā. They are clearly kings of the Solar line. The descendants of Harita, *Vāyu* says, became Brahmins endowed with Kṣātra and were attached to the Aṅgiras stock. The optional pravara which omits Aṅgiras and substitutes Māndhātā has to be explained. And I explain it on the supposition that some Hārītas remained Kṣatriyas and recited in their pravara only the Rājarṣis. The difference between this pravara and that of Garga is that Garga, adopted into a Brahmin family, recites Brahmarṣis only in his pravara ; while here even the Hārīta Brahmins stick to the two Rājarṣis, Ambarīṣa and Yuvanāśva.

Similar is the case with Maudgalyas who belong to the Pañcāla Lunar race. The pravara given by Āpastamba is as follows :—अथ मुद्गलानां श्यार्षेयः । आङ्गिरसभार्म्यश्वमौद्गल्येति । तृक्षमुहैकेऽङ्गिरसः स्थाने तार्क्ष्यभार्म्यश्वमौद्गल्येति ।

Now the line as given in the Purāṇas is Mudgala,

Bharmyaśva and Ṛkṣa, while the *Vāyu* states clearly मुद्गलस्यापि मौद्गल्याः क्षात्रोपेता द्विजातयः । एते ह्यङ्गिरसः पक्षे संश्रिताः कण्ठमुद्गलाः॥

But here again we have to consider the alternative pravara which omits Aṅgiras and substitutes Tārkṣhya. To my mind, some descendants of Mudgala remained Kṣatriyas and did not go into the Aṅgiras stock; and they recited their pravara as तार्क्ष्यभार्म्यश्वमौद्गल्येति, all the three names being names of Kṣatriya kings.

The third mentionable pravara is that of Viṣṇuvṛddhas. Says Āpastamba अथ विष्णुवृद्धानामाङ्गिरसपौरुकुत्सत्रासदस्यवेति । Here there is no optional change and the Viṣṇuvṛddhas appear to have all become Brahmins from Kṣatriyas of the Solar line. The *Vāyu* says विष्णुवृद्धः सुतस्तस्य विष्णुवृद्धा यतः स्मृताः । एते ह्याङ्गिरसः पुत्राः क्षात्रोपेताः समाश्रिताः । Viṣṇuvṛddha is in the *Vāyu* not a son of Trasadasyu but a great-great-grandson, the latter being a son of Purukutsa. As probably the intervening kings are not Ṛṣis or composers of Vedic hymns, they are not mentioned in the pravara.

In the Bhṛgu and the Aṅgiras stock there are enumerated gotras and pravaras which are शुद्धभृगु and शुद्धांङ्गिरस or केवलभृगु and केवलाङ्गिरस and these appear to me to be Kṣatriya lines. They may be mentioned here. Thus the work गोत्रप्रवरनिर्णय says चत्वारः शुद्धभृगवस्त्रयो हि जमदग्नयः । एते भृगुगणाः सप्त सप्तार्थो गौतजाः गणाः ॥......Now the four Śuddha Bhṛgus are (1) वैन्याः (पार्थाः भार्गववैन्यपार्थेति). This is a purely Kṣatriya line, viz. of Pṛthu and Vena who are now here said to have become Brahmins. (2) वाध्र्यश्वामित्रयुवः (तेषामेकार्षेयोवाध्र्यश्वेति). Now Vādhryaśva and Mitrayu are names of kings as may be found from the Purāṇas. (3) गृत्समदाः शुनकाः. Now Gṛtsamada is a well-known composer of Vedic hymns in the second Maṇḍala. The *Sarvānukramaṇī* of Kātyāyana even gives his story in the line "य आङ्गिरसः शौनहोत्रो भूत्वा भार्गवः शौनकोऽभवत्स गृत्समदः द्वितीयं

मण्डलमपश्यत् " *i. e.* He was a son of Śuna-hotra, probably a king of the Aṅgiras family and he became a Brahmin, a son or pupil of Śunaka of the Bhārgava line. The story of Gṛtsamada is given in the *Mahābhārata* Anu. P. Ch. 18, where he is said to have committed a mistake in reciting a Rathantara Sāma in Indra's sacrifice. But I do not know whether this story is the same as referred to in the commentary on *Sarvānukramaṇī*. In *Mbh.* Anu. Ch. 30 the story is given that Vītahavya, a Kṣatriya, became a Brahmin by the word simply of Bhṛgu. His son was Gṛtsamada whose son was Suceta ; his son was Varcas and in his line was born Ruru whose son was Śunaka whose son was Śaunaka the reciter of Vedas and the man to whom Sauti related the *Mahābhārata*. Śunaka is thus Gṛtsamada's descendant ; but there is another Śunaka who was his ancestor. The same names some-times recur and we have to be careful and find out the father's name also. The pravara alternatively given by Āśvalāyana is भार्गवशौनहोत्रगार्त्समदेति which proves that the Śaunakas were descendants of Śunaka, a descendant of Gṛtsamada.

It may be stated here that this story of Vītahavya becoming a Brahmin by the mere word of Bhṛgu and the other stories of Kṣatriyas becoming Brahmins, coupled with the pravaras themselves, show that in the Ṛgvedic times Brahmins and Kṣatriyas were not rigid castes but merely classes. It also appears to me that *Brahmins also often became Kṣatriyas*, as the story of Bharadvāja, a Brahmin, becoming the son of Bharata, son of Duṣyanta proves. The pravaras consequently appear to me to belong to Brahmins and Kṣatriyas indiscriminately.

(4) Vītahavya is himself a Ṛṣi and is mentioned in the pravara of यस्कवाधूलमौनमौकशार्कराक्षिसार्ष्टिसावार्णिशालङ्कायन-

जैमिनिदैवन्त्यायन gotras, viz. भार्गववीतहव्यसावेतसेति (Āśvalāyana). Apparently Gṛtsamada, his first son, went into another gotra, viz. that of Śunaka. And Vîtahavya and Śunahotra may be the same or father and son.

I need not go into the other pravaras. Although gotras are thousands, innumerable so to say, Baudhāyana counts the pravaras as 49 only (ऊनपंचाशदेवैषां प्रवराः परिकीर्तिताः) They are divided as follows:—Śuddha Bhṛgus 4, other Bhṛgus 3, Śuddha Aṅgirasas 7, through Bharadvāja 3, Gautamāngirasas 7, Atris 3, Viṣvāmitras 10, Kaśyapas 4, Vaśiṣṭhas 4, Agastyas 4, in all 49.

Lastly I have to turn to the Sūtra पुरोहितप्रवरो राज्ञाम्... and others and to the Sūtra that Kṣatriyas if they wish should recite the pravara मानवैलपौरूरवसेति. The Vaiśyas are again to recite their pravara as Vatsapri son of Bhalandana, who has no doubt composed a Ṛgvedic hymn. I surmise that these Sūtras were necessitated by the fact that even about the time of the Sūtras, i. e. about 100 B. C. or thereabout, the Kṣatriyas and Vaiśyas had begun to forget their gotras and pravaras and hence one pravara for each of them was provided. But this clearly contravenes the marriage-law, wherein gotras and pravaras are always to be consulted. As all Vaiśyas and all Kṣatriyas would be of one pravara, this prohibition would be meaningless for Kṣatriyas and Vaiśyas. And yet the Smṛtis—notably Yājñavalkya–apply it to them also. Are they then to regulate their marriage relations by the pravaras of their Purohitas? Have they no gotras of their own? * And yet inscriptions mention the gotras of Kṣatriya kings.

THE MENTION OF THE MAHĀBHĀRATA IN THE ĀŚVALĀYANA GṚHYA SŪTRA

By N. B. Utgikar

[*For the abbreviations used, see at the end of this paper, p.61.*]

It is well known to students of Sanskrit literature that one of the earliest references to the *Mbh.* occurs in the *ĀGS* III. 4. Indeed, the only other mention of that epic in any other work belonging to the ancient period of Indian literary history, is to be found in Pāṇini, VI. 2,38. All other early references to the poem occur in the *Mbh* itself (Compare P. W., s. v. Mahābhārata). It is the former of these two early references which forms the subject of this paper.

2. The passage itself of the *ĀGS.* under reference is as under :—

अथ ऋषयः शतर्चिनो माध्यमा गृत्समदो विश्वामित्रो वामदेवोऽत्रिर्भरद्वाजो वसिष्ठः प्रगाथाः पावमान्यः क्षुद्रसूक्ता महासूक्ता इति । प्राचीनावीती सुमंतुजैमिनि-वैशंपायनपैलसूत्रभाष्यभारतमहाभारतधर्माचार्याः ॥

(Page 15a of the Pothī form Nirnayasagar Edn. ; p. 164 of the Bibl. Indi. Edn. ; p. 29 of Stenzlers' Edn.; p. 127 of the Bombay Edn. of 1909.)

3. The mention of such an important work as the *Mbh* occurring in an early work of the post-vedic period naturally attracted the notice of modern Sanskritists from early times. Among these, Rudolph Roth was the first to draw attention to the passage (*Zur Litteratur des Weda*, 1846, p. 27). This he did, not from the point of view of the *Mbh.*, but only to draw attention to the mention therein contained of the traditional Ṛṣis or 'Seers' of the ten Maṇḍalas of the *RV* who are mentioned in the beginning of our passage. Weber followed him in 1852 in his *History of Indian*

Literature (p. 56 of the Eng. translation in the Trübner's Ori. Series Edn. of 1892), and in 1853 at p. 35 of his Catalogue of Sanskrit MSS. in the Berlin Imperial Library. Max Müller discussed the passage in 1859 in his *History of Ancient Sk. Liter.* (p. 22 of the Pāṇini Office Reprint of 1912), and R. G. Bhandarkar, in 1872, in the JBBRAS. Vol. 10 p. 81 ff. Later historians of Sanskrit literature and other scholars have taken due notice of the fact of Āśvalāyana's mentioning the *Mbh* (Macdonell, *History* p. 285 ; Winternitz, *Geschichte* I p. 400 and 402 ; C. V. Vaidya, *Mahābhārata*: *a criticism*, p. 6 ; B. G. Tilak *Gītārahasya*, p. 520, Holtzmann, *Das Mahābhārata* IV p. 27*f*, Dahlmann, *Das Mahābhārata also Epos* etc. p. 152*ff*; and Hopkins, *Great Epic of India* p. 389*f*; *cf.* also Oldenberg, *Indische Studien* Vol. XV, p 153, with reference to the corresponding passages of the Śānkhāyana and Śāmbavya Sūtras.)

4. For the history of the text of the *Mbh*, such a piece of testimony, pointing, as it would have done, to the existence of the *Bhārata* and the *Mahābhārata* for the time of Āśvalāyana, would have been highly valuable, were the authenticity of the text of Āśvalāyana unchallenged, and his date approximately fixed. But as is unfortunately the case with almost all other problems of Indian literature and chronology, the authenticity of our passage has been impugned on textual, comparative and interpretational grounds, and in general, its value sought to be belittled. Leaving aside, for the present, the question of the date of the *Āśvalāyana Gṛhyasūtra*, it is proposed to examine here some of the objections raised against our present passage.

5. Among the scholars referred to in para 3

above, Weber, Max Müller, Holtzmann and Hopkins express doubts concerning the authenticity of the words Bhārata and Mahābhārata occurring in the passage. The objections that can be raised against the passage have been perhaps best summarised by Hopkins (l. c. p. 389*f*). They are:—

(*a*) The Gṛhya Sūtras belong to the close of the Sūtra period.

(*b*) The words Bhārata and Mbh are a substitute for Itihāsa and Purāṇa mentioned earlier in the same Sūtra.

(*c*) Some of the latest Sūtras mention Itihāsa and Purāṇas, only the *ĀGS* mentioning *Bhārata* and Mbh. The *ĀGS* may therefore be justly regarded as one of the latest Sūtras.

(*d*) The *Śāṅkhāyana Gṛhya* does not mention *Bhārata* and *Mbh.*

(*e*) Therefore they are interpolated in the *ĀGS*.

(*f*) In some texts (*i. e.* MSS) of *ĀGS* only the Bhārata is mentioned ; therefore just as the *Mbh* may be supposed to have been inserted later, so we may hold that Bhārata itself might be an insertion in the *ĀGS.* This view gains support from a comparison of the text of *ŚGS* (cf. *d* above.)

(*g*) The *Śāmbavya Gṛhya Sūtra* mentions only *Mahābhārata*, with no mention of the *Bhārata.*

These variations in the mention of the *Bhārata* and the *Mbh*, show according to Hopkins' reasoning what the history of the mention of the *Mbh* might be: it might have grown from :—(1) No mention of either the *Bhārata* or *Mbh* in *Ś*GS and other Gṛhya Sūtras to (2) Mention of the Bhārata only in some MSS of *ĀGS*,

developing to (3) Mention of the Bhārata and Mahābhārata in some MSS of *ĀGS*, leading to (4) Mention of *Mbh.* only in *Śāmbaya Gṛhya Sūtra*, by the time of the composition of which, all tradition about a (smaller) *Bhārata* was obliterated, only the current bigger *Mahābhārata* being universally in the mouth of all.

6. As regards the textual question, it comes in thus. Max Müller states in his *HASL* (as quoted above) that one of the MSS of *ĀGS* belonging to the Library of the East India House, which he consulted gave the reading of the passage as .... भरतधर्माचार्याः instead of भारतमहाभारतधर्माचार्याः, the भ in the former being a mistake for भा. This reading gives rise to the supposition that one line of the traditional text of the *ĀGS* refers itself to a period when only the भारत was known : in other words to a period when the *Mbh* was yet to be. This is the interpretation put on this particular passage by Hopkins (l. c. p. 390) when he says " some texts make even the *Āśvalāyana Sūtra* omit *Mbh.* altogether, reading Bhāratadharmācāryāḥ" (Compare 5*f* above).

7. One of the other main grounds on which the authenticity of the *ĀGS* passage is doubted, I have ventured to call interpretational. Āsv., as is well known is a Sūtra Caraṇa of the *RV* and from a comparison of this passage with the corresponding one in the Gṛhya Sūtra of Śāṅkhāyana, another Sūtra Caraṇa of the same Veda, it is concluded by Weber (*History*, p. 56 *f*, Holtzmann, l. c. p. 27, and Hopkins l. c. p. 390) that as the *ŚGS* does not contain the two words, their presence in the *ĀGS* is an interpolation, pointing to a later date of Āsv. than Śāṅkhāyana. The corresponding passage in the *ŚGS* runs thus :—
(after क्षुद्रसूक्ताः महासूक्ताः) सुमन्तु : जैमिनिवैशम्पायनपैलसूत्रभाष्य

गार्ग्यबभ्रुबाभ्रव्यमण्डुमाण्डव्याः गार्गीवाचक्नवी.........कहोळं कौषीतकिम् ....ये चान्ये आचार्यास्ते सर्वे तृप्यन्तु (Oldenberg's Text, in *Indische studien* Vol. XV, p. 92).

8. Max Müller's transcription of the passage of the MS of *ĀGS* (this MS being the same as described by Eggeling in the catalogue of the Sanskrit MSS of the India Office Library, Vol. I, p. 41 under No. 253) and the conclusions drawn therefrom, led me to examine all the MSS of the *ĀGS* in the Government MSS Library at the Bhandarkar Institute, and it is found that while three MSS viz. No. 9 of A1879–80, No 75 of A 1881-82 and No. 68 of 1884-87 support the reading भारतमहाभारत, there is only one MS, viz. No. 8 of Viś I which gives the reading of भारत only (with no mention of महाभारत.) Further there are a number of good many other MSS of *ĀGS* described in reliable descriptive catalogues, viz. Weber's Berlin, Eggeling's India Office, Aufrecht's Bodlean and the Madras Library Catalogues. None of these catalogues note any variant. Three of the other MSS of *ĀGS* belonging to the India Office, were, before Eggeling, referred to by Roth too (l. c. p. VIII). It would thus appear that only two of the MSS examined read भारत (only), many of the others reading भारतमहाभारत.

9. But—and this is the point to be emphasised, but—one is not convinced that one has here to deal with two distinct lines of traditions in the text of the *ĀGS*—and that an examination of the MSS of the Sūtra reveals a particular period in the history of the Mbh. viz. that one when Āśvalāyana knew only the Bhārata. The discrepancy in the reading of this particular passage in the MSS of the ĀGS, is, I venture to submit, amply covered and can indeed be satisfactorily explained, by what students of textual criticism call 'Homœographa' or Haplography (see Article on

Textual Criticism by Postgate in the *Encycl. Brit.* 11th edition, Vol. 26, Compare also, F. W. Hall, *Companion to Classical Texts*, p. 189 (with examples) who calls this sort of mistake "Haplography"). This is simply and primarily a mistake of the eye, arising when similar letters or groups of letters stand next to each other, and it results in the loss of one of the similar group of letters. We can imagine easily, how, after the copyist had written the words पैलसूत्र भारत his eye might have unwittingly wandered on to the भारत of the next word, महाभारत, and thus the whole group महाभारत come to be omitted.

10. Further if we are to judge by the reading given by Max Müller (भरतधर्मा०) there would seem to be an additional reason for believing that in the transcription of this particular passage, the copyist had not had his wits about him, since he wrote भरतधर्मा० instead of भारतधर्माचार्याः. The former expression, as it stands, has no meaning. A further plausible reason for confusing the eye (and therefore the mind) of the scribe in this particular part of the text is also the presence of three भाs quite close to each other. In one of the Poona MSS, viz. No. 68 of 1884-87 the "भा" of भाष्य has been added by the copyist in the margin.

11. It is not therefore too bold a conjecture to make that the omission of the word *Mbh* in certain texts of the *ĀGS* is simply due to the copyist's error, and that we are not justified in holding that the text reveals to us two distinct lines of deviation, in one of which the word *Mbh* was interpolated subsequently. To put the same statement in other words; the tradition of a *Bhārata* as also of a *Mahābhārata* may reasonably be presumed to be known to the author of the *ĀGS* from the beginning.

12. A second objection against the trustworthiness of our present passage is that "here the words *Bhārata* and *Mbh* occur in a list of authors and works as substitutes for the earlier mention of Itihāsa and Purāṇa in the same place.........But when the words do actually occur, they are plainly additions to the earlier list" (Hopkins op. cit. p. 389). In the first place, it is to be observed that the second list in Āśva. is not of "authors and works" but of "authors" only, a fact to be referred to again below. It is now true that in the earlier section beginning with अथ स्वाध्यायमधीयीत (III. 3) Āśv. mentions गाथानाराशंसीः and इतिहासपुराणानि. It is also true that these two kinds of literature form the material from which the epic arose ; but the distinction lies in this that the earlier list is of works only–of Svādhyāya–and the second of authors or Ṛṣis and Ācāryās. More important than this is however the fact that the earlier list, and indeed the whole passage treating of the पञ्चयज्ञाs is mainly a summarised copy of *Śatap. Br.* XI. 5. 6., a fact noted by Oldenberg in his translation of *ĀGS* (SBE, Vol. XXIX, p. 218). We might compare, पयआहुतयो ह वा एता देवतानां यदृचः स य एवं विद्वानृचोऽहरहः स्वाध्याय-मधीते पयआहुतिभिरेव तद्देवांस्तर्पयति । त एनं तृप्तास्तर्पयन्ति योगक्षेमेण प्राणेन रेतसा सर्वात्मना सर्वाभिः पुण्याभिः सम्पाद्भिः &c. of *Śatap. Br.* with यदृचोऽधीते पयआहुतिभिरेव तद्देवतास्तर्पयति of *ĀGS*.

After enumerating the traditional list of ancient works as was known and preserved in his times, our author may reasonably be supposed to have begun afresh a list of Ṛṣis and Ācāryās after the Devatās. These are *not* mentioned in the earlier list. That the first passage of *ĀGS* very much resembles in substance that of the *Śatap. Br.* is simply a proof of how the later literature rests ultimately on, and naturally grows out of, the older materials and how it cannot simply be

called a growth due to some extraneous causes. It is no objection against the genuineness of the *ĀGS* mentioning the *Bhārata* and the *Mahābhārata* at the place where it does, to urge that the section of the *Śatap. Br.* to which it corresponds is itself a later addition to that Brāhmaṇa (cf. Weber, *History*, p. 121*f*), since the completion of the Brāhmaṇa as a whole must be presumed to have preceded the *ĀGS*.

13. Most of the scholars have regarded the *ĀGS* passage under discussion as a later interpolation. No cogent reasons are however adduced. Thus Roth (op. cit. p. 27) simply calls the whole of the passage as 'probably not originally belonging to this Sūtra' without, however, giving any additional reason. Perhaps the only reason that can be conceived is a comparison with the corresponding passage of Śāṅkhāyana. But is the *ŚGS* really older of the two? Is the maxim that shorter texts are older ones universally correct? Further, there are at least two arguments which can be adduced to show that no great weight can be attached to the absence of the words *Bhārata* and *Mbh* in the *ŚGS*. Oldenberg, the editor and translator of that Sūtra is inclined to regard chapters IX and X of the fourth Adh. of the *ŚGS* which contains the passage parallel to the *ĀGS* one, as a "supplementary addition" to chap. VI of the same Sūtra, *i. e.*, he regards the देवतातर्पण and the ऋषितर्पण sections of the *ŚGS* as *not* having originally belonged to that Sūtra (SBE Vol. XXIX, p. 120*f* foot note). If these passages are therefore to be regarded as borrowed, their source can be no other than the *ĀGS*.

14. And secondly the way in which the two words सूत्र and भाष्य are mentioned in the *ŚGS* is not convincing: the mention of two works only in the midst of a number of Ṛṣis and Ācāryās preceding and

following raises a strong presumption against their originally having formed part of the text. It will be understood that in the corresponding passage of the *ĀGS.* the mention is all of individual Ācāryas. Thus Āsv. begins अथ ऋषयः, and after महासूक्ता इति he begins a new passage सुमन्तुजैमिनिवैशंपायनपैलसूत्रभाष्यभारतमहाभारतधर्माचार्याः जानंतिबाहविगार्ग्य &c. But in *ŚGS* it is thus: सुमन्तुजैमिनीवैशंपायनपैल (all Ācāryas), सूत्रभाष्य (two works), बभ्रुबाभ्रव्यमण्डु etc., etc. to सुलभामैत्रेयी (again, all Ācāryas).

There is thus wanting in the *ŚGS* any supporting word to indicate the authors (आचार्यs) of the सूत्र and the भाष्य. Āsv. has previously mentioned the Ṛṣis of the ten Maṇḍalas of the *RV* in शतर्चिनो.........to क्षुद्रसूक्ता महासूक्ता इति, क्षुद्रसूक्ता महासूक्ता are Ṛṣis, *not* authors. Compare बृहद्देवता III. 116 p. 34 of Macdonell's Edn :—

प्रथमे मण्डले ज्ञेया ऋषयस्तु शतर्चिनः ।

क्षुद्रसूक्तामहासूक्ता अन्त्ये मध्येषु मध्यमाः ॥

When scholars speak of Āśv.'s mention of *Bhārata* and *Mbh.* in a tist of authors and *works*, it is probably due to the fact that क्षुद्रसूक्ताs and महासूक्ताs are regarded as works, when they are to be in fact regarded as Ṛṣis, and their not connecting the word आचर्याः with सूत्र, भाष्य, भारत, महाभारत and धर्म. Each class of work has necessarily to be taken singly with आचार्याः.

Oldenberg (l. c. p. 220) translates the passage of the *ĀGS* thus: "Sumantu, Jaimini, Vaiśampāyana, Paila, the Sūtras, the Bhāṣyas, the *Bhārata*, the *Mahābhārata*, the teachers of law, Jānati Bāhavi Gargya etc., etc....... the Sākala (text), the Bāṣkala (text).........Śaunaka, Āśvalāyan—and whatever other teachers there are, may they all satiate themselves." It can be urged against this translation that the Sūtras, the Bhāṣyas, the *Bhārata* and the *Mahābhārata*, (and further down) the

Śākala text and the Bāṣkala text cannot be regarded as teachers.

15. It is therefore very much doubtful whether the words सूत्र and भाष्य in the *ŚGS* did really form originally an integral part of the text, or whether the two words might not have crept in there through a more or less acquaintance with, or imperfect borrowing from, the *ĀGS*. In favour of this supposition speaks the circumstance that the mention of two works in the midst of a list of teachers is indeed a curious feature. As will be mentioned just below, there are some special reasons which would satisfactorily explain why Āśv. of all teachers should have mentioned *Bhārata*, and *Mbh*, and why the *ŚGS* and other texts might not have mentioned them, even granting that the former work did originally contain the suspected section on the *Tarpaṇa* and the mention therein of the two other classes of works, viz. the Sūtra and the Bhāṣya.

* * *

16. An attempt has been made above to vindicate the probability that the tradition of the existence of both a *Bhārata* and of a *Mahābhārata* was current in the time of the composition of the *ĀGS* and that it was therein embodied. Unfortunately the date of the Sūtra cannot be fixed even approximately: nay, the likely period of the composition of the class of works to which it belongs, is also a matter of much uncertainty. And it is still an open question whether the different "periods" of the early literature are exclusive or whether they often overlap each other. Apart from all this however, there are sufficient indications preserved for us in the literary tradition of India which enable us to understand why the *Bhārata* and the *Mahābhārata* might have come to be noticed and recorded by Āśvalāyana. This latter is a direct pupil of Śaunaka,

and Śaunaka's name is closely associated with the final redaction of the *Mbh.* itself. This point is of much importance and may well deserve our consideration.

17. Ṣaḍguruśiṣya, a vedic commentator, belonging to the latter half of the 12th century A. D. who "lived in the middle of the period of the revival of Vedic studies in India, almost half way between Kumārila and Sāyaṇa" (Macdonell, in the preface to his Edn. of Kātyayāna's *Sarvānukramaṇī*, preface p. XIX) throws a flood of useful and interesting light on these relations of preceptor and pupil between Śaunaka and Āśvalāyana, as also on the works composed by them two. (For the passage itself, see Max Muller History, p. 120). That Āśvalāyana was a pupil of Śaunaka can also be seen from the way in which Āśv. concludes his Sūtra–नमः शौनकाय. Ṣaḍguruśiṣya has also something more to tell us. Before enumerating the works, which Śaunaka composed "for the preservation of the Veda" (*vedaguptaye*), he informs us how Ugraśravas narrated the *Mbh.* Ākhyāna to the great sage Śaunaka during his twelve-years sacrifice. As is well known, this account is also mentioned in the *Mbh.* itself (I. 1. 4 etc.). The same writer further tells us that Śaunaka narrated to King Śatānīka, the son of Janamejaya, the विष्णुधर्मान्. Śaunaka therefore is to be regarded as a teacher of Āśvalāyana, and also as one standing in close relation with the third Paurava king after Parīkṣit, the son of Abhimanyu. (cf. Pargiter, *Dynasties of the Kali Age* p. 4, and the Paurāṇic authorities quoted there regarding Śatānīka and Śaunaka).

18. All this therefore converges to substantiate our contention that there is a particular propriety in the mention of the *Bhārata* and the *Mbh.* in the Āśvalāyana Sūtra. The writer is an immediate pupil

of Śaunaka; one of the literary activities which Śaunaka therefore might be reasonably supposed to have countenanced, finds an appropriate mention in the writing of the pupil of Śaunaka.

19. We have now to consider the significance of the mention of both the *Bhārata* and the *Mbh.* in the *ĀGS.* Here we have unfortunately to rely solely on the statement of the Mbh. itself regarding its growth. The two main statements are :—

(I) इदं शतसहस्रं तु श्लोकानां पुण्यकर्मणाम् ।
उपाख्यानैः सह ज्ञेयमाद्यं भारतमुत्तमम् ॥

(II) चतुर्विंशतिसाहस्रीं चक्रे भारतसंहिताम् ।
उपाख्यानैर्विना तावद् भारतं प्रोच्यते बुधैः ॥

These verses make it clear that the (smaller) *Bhārata* of 24,000 verses grew into the (greater) *Bhārata* of 100000 verses. The former did not contain the उपाख्यानs. With the addition of the उपाख्यानs however, it reached the dimension of one hundred thousand verses. (Mbh. I. 1 101b. to 103a in Bombay edn.)

20. Are we however justified in holding that the भारत became the महाभारत before Āśvalāyana? or in other words that the उपाख्यानs were added before Āśvalāyana? I think, yes. The personage who recited the Mahābhārāta to Śaunaka, is Ugraśravas, the पौराणिक who is also पुराणे कृतश्रमः. Here is perhaps offered to us a hint that Ugraśravas is responsible for the addition of the matter over and above the 24,000 verses—*Bhārata* of old. This matter is of a Paurāṇic kind, since "in a Purāṇa are forsooth contained divine stories and initial geneologies of the wise" पुराणे हि कथा दिव्या आदिवंशाश्च धीमताम् (*Mbh.* 1, 5.2). We might also compare the introduction to I. 1, and conclude that it was the most diverse kinds of stories that imparted the महाभारतत्व to the original epic.

21. It is not improbable that the additions made to the *Bhārata* were still fresh in the minds of the people and were recognised as such about the time of Āśvalāyana. The additions soon came to be regarded as a part and parcel of the work, and so both these circumstances led to the mention of the *Bhārata* and the *Mbh.* in the *ĀGS*. Lastly it has to be noted that the *Mbh.* being closely connected originally with the name of Śaunaka, it may not have been deemed necessary by the other Sūtra-writers to enumerate it in the स्वाध्याय list of their respective Sūtras. In this respect it is to be observed however, that the *Mbh.* is usually regarded as being developed in the School of the Yajurvedins (cf. Hopkins l. c. p. 368). This hypothesis requires however additional evidence before it can command general acceptance. It may after all turn out that the ascription of such general works as the *Mbh* to a particular school may be unjustifiable. The contents of such works would seem to protest against such a procedure. There is nothing particularly Ṛgvedic or Yajurvedic about the *Mbh.* which may entitle us to ascribe it more to either of the Vedic schools concerned. The probabilities would, if any thing, point to a different conclusion than the one quoted above. But this is not what at present we are immediately concerned with.

22. Max Müller says (*HASL.* p. 119) that if the Śaunaka who is the preceptor of Āśvalāyana and the Śaunaka to whom the *Mbh.* was recited, be one and the same person, then " a most important link would be gained, connecting Śaunaka and his literary activity with another period of Indian literature. But this point must be reserved for further consideration." That Śaunaka and Āśvalāyana belonged to what might be

called the connecting link of two literary periods, which almost imperfectibly glide into each other, is clear enough from another piece of tradition left to us by Ṣaḍguruśiṣya and also by Sāyaṇa. Their works cover the Vedic as also the subsequent period. Āraṇyaka V of the Aitareyāraṇyaka is attributed to Śaunaka, and the fourth of the same work to Āśvalāyana (For this whole question, see Oldegberg, SBE, Vol. XXIX, p. 154*f*). We might also compare the Mbh. itself I IV 6, where Śaunaka is called शास्त्रे चारण्यके गुरुः. We also know what other works of the Sūtra style are attributed to these two writers. They therefore stand at the juncture, or if we so will, at the parting of the ways of the Vedic and the Sūtra period. Their works are influenced by the motive of the preservation of the old Vedic literature—*vedagupti*. It is to be added that if we would fain believe this part of the tradition recorded by Ṣaḍguru-śiṣya and Sayana, regarding their authorship of parts of the *Ait. Ar.*, there is no reason why we should disbelieve Ṣaḍguru's another statement that it was also this Śunaka to whom the *Mbh.* was recited.

* * *

Lastly I have only one point to allude to. Supposing the *Mbh.* war to be a real event, a new era seems to have been opened in literary, social and Political matters, with the advent of the Pāṇḍava dynasty. I grant that here we have mainly Paurāṇic authorities to depend upon but at the same time it is to be remembered that they are not lightly to be set aside. If this be admitted, the reigns of the earlier Paurava kings gain greatly in significance. Janamejaya, the son of Parīkṣit is reported in the Purāṇas to have a bitter quarrel with Vaiśampāyana (cf. Pargiter l. c. p. 86 f.). The *Mbh.* itself was first promulgated by Vaiśampāyana during Janamejaya's reign. Though

the exact nature of the dispute between Janamejaya and Vaiśampāyana cannot be ascertained, still so much is certain that the supreme authority of the Brahmins began to be called in question. It was to his son Śatānīka that, according to Ṣaḍguruśiṣya, the *Mbh.* was (again?) recited by Śaunaka. It is also a significant fact that the geneology given in prose of the Paurava line in the *Mbh* itself (I.95) stops with Aśvamedhadatta, Śatānīka's son. The initial compilation of the modern Purāṇas would seem to go back to the reign of Adhisīmakṛṣṇa, the fifth king of the Paurava line (आधिसीमकृष्णो धर्मात्मा सांप्रतं योमहायशाः compare Pargiter, l. c. p. 4, and Intro. p. VIII f.) It would thus look that the new order of things established after the great war, was marked by a peculiar outburst of literary and social activity. Brahmins or Ācāryas like Śaunaka and Āśvalāyana were at once engaged in consolidating and establishing on a secure basis the old Vedic literature, and in producing and lending support to works suited to the altered times. There were probably as already mentioned, kings like Janamejaya too, who began to challenge the overweening Brahmanic presumption, asserted with undue emphasis with regard to seemingly insignificant ritualistic details.

* * *

I only hope to have made clear that the mention of the *Bhārata* and the *Mbh.* in the *ĀGS* is to be held as textually genuine and justified by other important considerations, and that if this be admitted—as I think, it must be—then we shall have succeeded in gaining an important link—an *Anhaltspunkt*—justifying us in taking the history of the origin and development of the *Mbh.* appreciably backward.

This subject must for the present remain here:—objections could possibly be raised against the line of

reasoning here followed. A consideration of these together with a discussion of the similar mention of the *Mbh.* in Pāṇini and of the probable dates of these two works, as also the question of the individual or school authorship of works like the *ĀGS*, and similar other questions must be reserved for some future occasion.



The abbreviations used in this paper are:—

ĀGS	=	Āśvālayana Gṛhya Sūtra
Āsv	=	Āśvalāyana
HASL	=	History of Ancient Sanskrit Literature
Mbh.	-	Mahābhārata
P.W.	=	Böhtlingk and Roth's Petrograd Sanskrit German Dictionary.

Postscript:—As the proofs are being passed for the Press, I take the occasion of stating that tha first of the two verses of Mbh. I 1 referred to on p. 57, above, *viz* इदं शतसह्स्रं तु is found wanting in five of of the six MSS of the Government Library with us. The omission is not accidental and therefore acquires a peculiar significance, though the former half of this verse which recurs in the text (G. K. I. 62.14a) is found at this latter place in all these MSS.—N. B. U.

THE AUTHORSHIP OF THE NIGHAṆṬU.

By R. D. Karmarkar.

(*All references to pages are to the* व्यंकटेश्वर *press edition.*)

Tradition regards the *Nighaṇṭu* and the *Nirukta* as the work of one and the same author *viz.* Yāska. The fact that this tradition cannot stand has been recognised even by the commentator Durga, who, at the very beginning of his commentary, says स [समाम्नाय:] च ऋषिभिर्मन्त्रार्थपरिज्ञानायोदाहरणभूतः पञ्चाध्यायीशास्त्रसंग्रहभावेन एकस्मिन्नाम्नाये ग्रन्थीकृत इत्यर्थः, thus attributing the Samāmnāya to ancient sages and not to Yāska. On p. 307 also Durga remarks 'अकूपारस्य दावने' इत्ययमनयोः पदयोरनुक्रमः । समाम्नाये पुनः 'दावने अकूपारस्य' इति मन्त्रपाठव्यतिक्रमेणानुक्रमः । तेन ज्ञायतेऽन्यैरेवायमृषिभिः समाम्नायः समाम्नातः अन्य एव चायं भाष्यकार इति । एको हि समाम्नायं भाष्यं च कुर्वन् प्रयोजनस्याभावादेकमन्त्रगतयोः पाठानुक्रमं नाभङ्क्ष्यत् . Roth[1] in his Introduction to the Nirukta draws attention in this connection to the famous passage साक्षात्कृतधर्माण ऋषयो बभूवुः...उपदेशाय ग्लायन्तोऽपरे बिल्मग्रहणायेमं **ग्रन्थं समाम्नासिषुर्वेदं** च वेदाङ्गानि च which clearly proves that the निघण्टु was the work not of Yāska himself, but of ancient sages.

Following are the additional arguments to prove that the *Nighaṇṭu* could not have been written by the author of the *Nirukta*.

(1) The *Nirukta* opens with the passage समाम्नायः समाम्नातः स च व्याख्यातव्यः । तमिमं समाम्नायं निघण्टव **इत्याचक्षते** (p. 4 & 5). The expression आचक्षते clearly shows that the समाम्नाय was called निघण्टवः by *others*. If Yāska had been the author of the निघण्टु, he could not have written that his work received its name from others. Similarly the

1 P. 4. Translation by Dr. Mackichan, Bombay University.

first half of the passage shows that Yāska is going to explain the समाम्नाय which had been already compiled or authoritatively[2] collected before. The expression आचक्षते occurring in the following passages corroborates what has been said above. तद्यानि नामानि प्राधान्यस्तुतीनां देवतानां तद्दैवतमित्याचक्षते (p.95), तदैकपदिकमाचक्षते (p. 267).

(2) The well-known passage साक्षात्कृतधर्माण ऋषयो बभूवुः ...ग्रन्थं समाम्नासिषुर्वेदं च वेदाङ्गानि च proves the same.

(3) The निघण्टु includes तळित् under अन्तिकनामानि (p, 200) and also under वधकर्माणः (p. 204). Following the निघण्टु Yāska remarks on p. 206 तळिदित्यन्तिकवधयोः संसृष्टकर्म ताडयतीति सतः. But on p. 207 after giving शाकपूणि's view that तळित् means विद्युत्, Yāska remarks that the meaning अन्तिक also would suit the passage दूरे चित् सन्तळिदिवातिरोचसे the meaning being दूरेऽपि सन्नन्तिक इव सन्दृश्यसे इति. Yāska seems to regard अन्तिक as the proper meaning of तळित्.

(4) On p. 204, seven roots are given under nouns व्याप्तिकर्माणः by the निघण्टु. The list includes two nouns आक्षाणः आपानः as Yāska himself remarks तत्र द्वे नामनी आक्षाण आश्नुवान आपान आप्नुवानः. Apparently the निघण्टुकार mistook these two for roots and Yāska draws our attention to the discrepancy.

(5) Similarly on p. 204, the three words विद्यातः, तळित् and आखण्डल, though nouns, are wrongly put in the list of वधकर्माणः.

(6) On p. 213, in the list of महन्नामानि, two roots ववक्षिथ and विवक्षसे are wrongly put. Yāska obviously would not have made such a mistake.

(7) On p. 217 in the list of पश्यतिकर्माणः, two nouns विचर्षणिः and विश्वचर्षणिः are included, Yāska himself remarking नामान्यामिश्राणि.

2 Dr. Bhandarkar in his article on the Mandasor Inscription JBBRAS, P. 913 gives this as the meaning of समाम्नात.

(8) In the ऐकपदिक section, the निघण्टु gives the word मेहना (p. 275). Yāska explains it as मंहनीय and proposes an alternative explanation that it might be split up into मे इह न, three different words. Yāska would not have included this word in the ऐकपदिक section as he does not regard it as one word in the alternative explanation. Similarly on p. 323 Yāska seems to regard शंयोः as made up of two words.

(9) On p. 286, commenting upon शिप्रे Yāska says शिप्रे इति उपरिष्टात् व्याख्यास्यामः and explains it under सुशिप्र (p. 488). Yāska would have included only one of these words in the text rather than giving the two similar words in two different places and then referring one to the other.

(10) Similarly on p. 361, he says ह्रासमाने इति उपरिष्टात् व्याख्यास्यामः, on p. 371 वक्षो व्याख्यातम्, on page 431, परिसीमिति व्याख्याताः. Yāska would not have included the निपातs, परि, ईम्, सीम्, which he explains in his introduction.

(11) (P. 306) The निघण्टु gives दावने अकूपारस्य, while the Vedic order is अकूपारस्य दावने and Yāska follows that order. If he had been the author of the निघण्टु, he would have corrected the order easily. This is the only place[3] where the निघण्टु does not follow the order of the Ṛgvedic passage. The following list of consecutive words in the निघण्टु occurring in one and the same passage, keeps up the original order विद्रधे, द्रुपदे (p. 293); वाहिष्ठो, दूतः (p. 347); कुटस्य, चर्षणिः (p. 422); अनवायम्, किमीदिने (p. 469); श्रुष्टी, पुरंधिः (p. 474); चनः, पचता (p. 484); सदान्वे, शिरिंबिठः (p. 524).

(12) On p. 357, in the ऐकपदिक section we have सोमो अक्षाः. Durga remarks upon this that the word सोम is

3 On p. 380 शिपिविष्टः, विष्णुः are given. Possibly this is also a case of inverted order. The passage has...विष्णोः...शिपिविष्टस्य

put in for the better understanding of the मन्त्र (मन्त्रस्य प्रतिपत्त्यर्थं सोमशब्दः समाम्नात इति), but this is hardly satisfactory. The difficult word is अक्षाः only; Yāska does not explain सोम at all.

The two words शिपिविष्ट and विष्णुः are given on p. 380; Yāska does not explain विष्णु. Of देवो देवाच्या कृपा on p. 465, Yāska does not explain देव at all. If he had been the author, he would not have put in देवो at least in the above expression.

On p. 425 तूतुमाकृषे occurs in the निघण्टु as one word. Yāska explains it as तूर्णमुपाकुरुषे. The difficult word is तूतुम् which only ought to have been included in the निघण्टु. The निघण्टुकार seems to have regarded तूतुमाकृषे as one word.

On p. 402, कौरयाणः and तौरयाणः are included in the निघण्टु. As they are similar in formation Yāska would have given only one of them.

On p. 433, आशुशुक्षणिः occurs as one word. Yāska explains it in various ways. He takes आशु and शु to mean क्षिप्र and separates the two words from क्षणिः according to one explanation.

On p. 480, the words असूर्ते सूर्ते should not have been given separately.

(13) In explaining the list of difficult words in the 4th Adhyāya of the निघण्टु, Yāska has offended the first three lists; thus: —He gives a meaning to certain words in the 4th Adhyāya but these words are not included in the first three Adhyāyas under these meanings.

(*a*) Thus on p. 359 he says श्वात्रमिति क्षिप्रनाम, but श्वात्रं is not included in the list of 26 क्षिप्रनामानि (p. 199.)

(*b*) On p. 375, he says द्युम्नं...अन्नं वा, but द्युम्न is not included in the list of 28 अन्ननामानि (p. 194).

(*c*) On p. 407, he says तूर्णाशमुदकं भवति, but तूर्णाशम् is not included in the list of 100 उदकनामानि (p. 159–60).

(*d*) On p. 417, he says कृति...अन्नं वा, but कृतिः is not included in the list of 28 अन्ननामानि (p. 194).

(*e*) On p. 423, he says शम्ब इति वज्रनाम, but शम्ब is not included fn the list of 18 वज्रनामानि (p. 208).

(*f*) On p. 474, he says श्रुष्टीति क्षिप्रनाम, but श्रुष्टी is not included in the list of 26 क्षिप्रनामानि (p. 199).

If Yāska had been the author of the निघण्टु, he would have included these words in the lists in the first three Adhyāyas, not in the fourth.

There are again to be found in the fourth अध्याय of the निघण्टु certain words which have been already included in the lists in the first three अध्यायs. If Yāska had been the author of the निघण्टु, he would not have put these words in the 4th अध्याय of the निघण्टु, as their meanings are already known from the first lists. For these words see II below.

It will be seen from the above, that there is conclusive evidence to prove that Yāska could not have been the author of the *Nighaṇṭu*.

II

Nor does the *Nighaṇṭu* seem to be the work of only one author. Thus for instance, the author of the second section of the fourth Adhyāya of the *Nighaṇṭu* is clearly different from the author of the first three Adhyāyas, as shown from the fact that the second section of the fourth Adhyāya gives certain words, the meanings of which have already been given in the first three Adhāyas.

Thus अन्धः IV. 2.6, वराहः IV. 2.21, स्वसराणि IV. 2.22, शर्याः IV. 2.23, सिनम् IV. 2.28, वयुनम् IV. 2.48, are already explained in II.7.1, I.10.13, I.9.5, II.5.5, II.7.8, III.9.10

respectively. It is clear therefore that the author of the second section of the fourth Adhyāya was not aware of the first three Adhyāyas.

Similarly the author of the third section of the fourth Adhyāya must have been different from the author of the third section, as the word दूत: which occurs in IV. 2.3 is repeated again in the third section IV. 3.99.

The author of the first section of the fourth Adhyāya must be different from the author of the third section of the same Adhyāya, as शिप्रे occurs in IV.1.11 and a similar word सुशिप्र: is repeated again in IV.3.72.

In the fourth Adhyāya of the निघण्टु, there are eight pairs of consecutive words occurring in the same Ṛgvedic passage, out of which (1) Two occur in IV.1. दावने अकूपारस्य IV.1.32,33 and विद्रधे द्रुपदे IV.1.18,19, (2) Two occur in IV.2, वाहिष्ठ: दूत: IV.2.2.3 and कुटस्य चर्षणि: IV.2, 70,71 and (3) Four occur in IV.3 अनवायम्, किमीदिने IV.3. 43, 44 श्रुष्टी, पुरन्धि: IV.3.50,51. चन: पचता IV. 3.64.65, सदान्वे शिरिंबिठ: IV.3.119,120. In the case of the first section, the exact words occurring in the passage are taken, though the order is changed in the case of दावने अकूपारस्य. In the case of the second section वाहिष्ठो...दूतो in the passage is reduced to its original वाहिष्ठ: and दूत:

But in the case of the third section, while अनवायम्, किमीदिने, and चन:, पचता are taken unchanged, श्रुष्टी पुरन्धि: and सदान्वे शिरिंबिठ:, are substituted for the श्रुष्टी पुरन्धिम् and सदान्वे शिरिंबिठस्य of the original passage. If one can keep in tact दावने अकूपारस्य in IV. 1, one fails to understand why शिरिंबिठस्य should lose its genitive or पुरन्धिम् its accusative. It is clear therefore that the third section must not have been produced by the author of the first section of the 4th Adhyāya.

तळित् is taken once as a noun II.16.1, and once as a verb II.19.21.

THE NIGHAṆṬU AND THE NIRUKTA.

By Siddheshwar Varma.

What is the *Nirukta?* This expression may be considered from two aspects, the *Nirukta* as a book, and Nirukta as a subject. What is the *Nirukta* as a book? This question is anticipated and answered by the word *vyākhyātavyaḥ* occuring in the very first line of the *Nirukta*. This word *vyākhyātavyaḥ* means to be explained. For, the central idea of the word Nirukta is also explanation, derived as it is from the verb *vac* with the prefix *nir*, to explain. In this sense of explanation, the expression Nirukta first occurs in the *Chāndogya Upaniṣad* viii-3-3, where it is said about the heart as well as the soul:—'This soul is present in the heart (हृदि), and this also is the explanation (*niruktam*) of 'हृदय'. The *Nirukta* as a book, is therefore an explanatory commentary on the work which Yāska calls the Samāmnāya, but which is more commonly known as the Nighaṇṭavaḥ or simply the *Nighaṇṭu.*

The Samāmnāyā, the *Nighaṇṭu,* of which Yaska's *Nirukta* is a commentary, is the name of a Dictionary of 1765 Vedic words in five chapters with this reservation, however, that we consider even the *phrases* in *Naighaṇṭuka*–13, as words, for the phrases merely illustrate the particles of Analogy as *iva*. Of these 1765 Vedic words, 350 words have been explained by Yāska in his *Nirukta*, as Devarāja says "नैघण्टागतेष्वेव पदेष्वध्यर्धशतत्रयमात्राणि पदानि भाष्यकारणैव तत्र तत्र निगमेषु प्रसंगात् निरुक्तानि" in the introduction to his own commentary on the *Nighaṇṭu.*

The *Nighaṇṭu* has three sections, the Naighaṇṭuka, the Naigama and the Daivata.

The Naighaṇṭuka section corresponds more to the

modern Dictionary than the other sections, for it enumerates in three chapters some 1336 synonymous words, while the latter merely give obscure or important Vedic expressions, *without explaining them* or referring to their equivalents. The arrangement of these words is based neither on the alphabetical system nor on any distinct classificatory system.

The first chapter of this section consists of words mostly expressing some phenomenon in Nature, like the earth, the cloud etc. The second chapter enumerates words concerning human and animal life, *i. e.* names of man and beast, etc. The third chapter consists of abstract terms—as synonymous words for happiness, truth and also ritualistic terms. The whole section consists of 843 nouns, 365 verbs, and 128 adjectives and particles.

The second section designated the Naigama section (from Nigama-Vedic text) may be called a "Homonymous lexicon," as it consists of 278 single, obscure words from the text of the Vedas.

In the third section designated Daivata 151 Devatas of the various Vedic Mantras have been enumerated and classified according to their three domains-the Earth, the Atmosphere, and Heaven.

It is important to note in this connection that our *Nighaṇṭu* is the most ancient of extant lexicons in India. The most common designation for a lexicon in Sanskrit is Kośa, literally a treasure; the complete designation is 'Abhidhāna Kośa', or simply 'Abhidhāna' (name). The word Abhidhāna, as an abbreviation of Abhidhāna Śāstra (Lexicography) is employed to designate the whole Literature of this type, e. g. in the notices of Sanskrit manuscripts in the Calcutta Library. Other, and probably more ancient names of lexicons

are.:—Nāmapārāyaṇa, Nāmamāla (mālā also); as *Amarmālā*, *Deśīnāmamālā*; finally Nighaṇṭu also written Nirghaṇṭu, Nirghaṇṭa[1] (probably due to wrong reading of Mss.), and in Jaina-prākrita, Nigghaṇṭa.

According to the eminent lexicographer, Hemacandra, *Nighaṇṭu* means a collection of names (निघण्टुर्नामसंग्रहः), while Sāyaṇa in his introduction to the *Ṛgveda* defines the term Nighaṇṭu thus : "एकार्थवाचिनां पर्यायशब्दानां संघो यत्र प्रायेणोपदिश्यते, तत्र निघण्टुशब्दः प्रसिद्धः, तादृशेष्वमरसिंह-वैजयन्ती-हलायुधादिषु दशानिघण्टव इति व्यवहारात्". The term, however, is generally applicable, not only to a vocabulary or any list of synonymous words, but also to any exhaustive and classified catalogue of technicalities and properties of things. Thus in Sanskrit medicine, there are several books styled the Nighaṇṭus, e. g. *Rājanighaṇṭu*, *Rājavallabhanighaṇṭu*, *Nighaṇṭuratnākara*, *Madanapālanighaṇṭu*, etc. The *Madanapālanighaṇṭu*, to quote only one example, gives the properties and names of all drugs (सर्वौषधिनामगुणानां निघण्टुः). Again in Sanskrit Astronomy we have *Jyotiṣaśāstra-Nighaṇṭu*, a work which indicates the names of seven famous Astronomical categories, the lunar mansions, etc. Hence the word *nighaṇṭu* has acquired a significance as wide as the word Dictionary in modern times though the method of the Nighaṇṭu is much briefer than that of the Dictionary. It is indicatory rather than explanatory.

The place of our *Nighaṇṭu* is unique in Sanskrit Lexicography. As we have already stated, the *Nighaṇṭu* is the oldest of extant lexicons in India; and it differs essentially from the later works on Lexicography in contents, form, and object as under.

(*a*) In our *Nighaṇṭu*, not only nouns and indecli-

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1 cf. Monier-William's Dictionary on *Nirghaṇṭa*.

nables, but also *verbs* have been enumerated. Not so the later Kośas.

(*b*) The *Nighaṇṭu* merely enumerates its words in prose order; but the later Kośas are all metrically composed, the usual metre being Anuṣṭubha and sometimes Āryā also.

(*c*) Our *Nighaṇṭu* is a *sacred*-book, as its object, fully treated in the *Nirukta* 1. 6. 5, is to serve as a key to the explanation of Vedic texts. As Herr Zachariae *Die Indischen Wörterbücher* p. 3, says, the glossaries of the *Nighaṇṭu* must have served as practical guides to he Vedic teacher for oral instruction, as we can infer from the fact that in the Naigama section of the *Nighaṇṭu*, single words from Vedic texts have been enumerated, while their meanings have not been given at all.

But the later extant works on Sanskrit Lexicography are mostly nothing else than collections of important and rare words for the use of *poets*. Thus the Abhidhāna Kośa is styled one of the "auxiliary branches of Kāvya " (Kavyāṅgāni) and often the later Lexicographers sufficiently emphasize, in the introduction to and conclusion of their works, that they write for the poets. Compare phrases as "for the sake of adorning the throat i. e. the voice) of the poet" (Halāyudha); "the ornament of good poets" (*Vaijayantī*), "with good wishes for poet-(Dhanañjaya), "for the happiness of poets" (*Dharaṇikośa*) These aims are professedly secular. The only later (lexicon that resembles our *Nighaṇṭu* in its object and contents is the *Mahāvyutpatti* of the Buddhists. It enumerates not only synonyms, but also phrases, verbal forms and even whole sentences. And just as the words of the *Nighaṇṭu* directly refer to the sacred texts of the Vedas, so the *Mahāvyutpatti* is directly related to the Sacred Works of Buddhism.

Now what is the Samāmnāya, the very first word of the *Nirukta*? It has already been pointed out that here the Samāmnāya is what is more commonly known as the Nighaṇṭu. The word Samāmnāya, as Durga has explained it, is derived from the verb *mnā* to repeat, with the prefixes *sam* and *ā*, the whole word indicating passive sense, and so it means, 'That which is properly repeated according to the rules of tradition. In the same sense the word *āmnāya* is employed. The central idea of the verb *mnā*, connected as it is with the verb *man* to think, is to repeat mentally, i. e. to remember. Āmnāya would then mean correct repetition memoriter (Monier Williams). Thus this word signifies traditional knowledge,[2] handed down by teacher to pupil from generation to generation. The prefix *sam*, further added to the word āmnāya, indicates combination, collection. Thus the whole word Samāmnāya means traditional collection or compilation. Yāska himself, in a famous passage in the *Nirukta* 1.6.5, uses the verb *samāmnāsiṣuḥ*, in the sense of "compiled", while a much earlier work, the *Aitareya Āraṇyaka* III.2.3, uses Akṣarasamāmnāya in the sense of "collection of letters".

The word Samāmnāya, however, must be strictly translated here as " the traditional collection of *Vedic* words". We now come to another more general significance of the term Samāmnāya.

The terms Āmnāya and Samāmnāya are often used for the Veda. Thus according to the *Nāmaliṅgānuśāsana*, the words Śruti, Veda, Āmnāya and Trayī are synonymous for the Veda. Further, both Āmnāya and

2 Cf. *Vācaspatyam*—" आम्ना-घञ् सम्यगभ्यासे सम्यक्पाठे च। आम्नायः = अभ्यासस्य सम्यक्त्वं च नियमधारणपूर्वकत्वं—गुरुमुखश्रवणपूर्वकत्वम्" and *Śabdakalpadruma*—:" गुरुपरंपरोपदेशः"

Samāmnāya are synonymous terms for the Veda, as Nāgeśa on 'iti Māheśvarāṇi' says in his *Laghuśabdenduśekhara*. In the famous Sūtra of the *Pūrva Mīmāṃsā* 1-2-1, 'The purpose of the Veda (*Āmnāyasya*) being to lay down actions &',—the term Āmnāya clearly means the Veda. In the same sense the word Samāmnāya has been employed in the *Pūrva Mīmāṃsā Sūtra* 1-4-1, 'It has been explained that the Veda (*Samāmnāya*) pertains to actions'. And our own Yāska, when defending the relevance of such Vedic passages as 'O axe, do not kill' I-16-6, says that harmlessness appears from the explicit word of the Veda (*Āmnāya*). Again while refuting the view that Vaiśvānara means "Sūrya", Yāska says that the descent after ascent can be attributed to Vaiśvānara also by the explicit words of the Veda (*Āmnāya*), vii-2,4-2. Veda, then, is the general significance of the term Āmnāya or Samāmnāya.

We have seen above that the special as well as the central implication of this term is "traditional knowedge" that is handed down by teacher to pupil from generation to generation. It is true that various forms of secular knowledge in India have also been handed down by tradition, but these sciences have been modified or improved upon from time to time by various individual teachers. It is the Veda which is the traditional knowledge par excellence, the minutest syllables and accents whereof have been handed down unchanged from time immemorial. Hence the Veda is appropriately called "Śruti" (hearing). The term Samāmnāya, then, equally suits the Veda, and the Veda, therefore, is the primary meaning of the term Samāmnāya.

But there is also a secondary significance of the term Samāmnāya. By analogy, any form of traditional

knowledge, especially auxiliary sacred knowledge, can be called Samāmnāya. Thus, as Durga says, the collection of Vedic words called the *Nighaṇṭu* can also be designated the Samāmnāya, because these words have been taken from the Veda; and consisting as it does of portions of the Veda, it has acquired thereby the characteristics of the Veda. Even Yāska includes all the Vedāṅgas under the word Samāmnāya in *Nirukta* 1-6-5, where the sages are said to have compiled (Samāmnāsiṣuḥ)[4] the Veda and the Vedāṅgas. Further, not only the Sanskrit alphabet[5] given by Paṇini has been called the Samāmāya, but the term has been extended even to works on the Drama. Thus, according to Pāṇini IV. 3-129, the suffix *ñya* is to be added to the word *naṭa* in the sense of duty or traditional knowledge (Āmnāya). Hence the word *Nāṭya* is formed, and it means "the duty or traditional knowledge of actors." The secondary significance, then, of the word Samāmnāya is *any* 'sacred or honoured work'.

No doubt the central idea in this secondary significance of the word Samāmnāya is the same, viz. traditional knowledge, but in this case the term, which primarily denoted the Veda, has been secondarily extended to other forms of traditional knowledge also.

The above discussion gives us three meanings of the word Samāmnāya :—(1) Its literal meaning, viz., 'traditional compilation,' (2) Its primary meaning, viz., 'the Veda,' (3) Its secondary meaning, viz., 'any sacred or honoured work.' I am of opinion that the word

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3 In the introdution to his commentary, cf. "छन्दोभ्यः समाहृत्य समाम्नाता सैषा छन्दोऽवयवभूता छन्दोधर्मिण्येव"

4 "समाम्नासिषुर्वेदं च वेदाङ्गानि च।

5 "येनाक्षरसमाम्नायमधिगम्य महेश्वरात्। कृत्स्नं व्याकरणं प्रोक्तं तस्मै पाणिनये नमः"
"छन्दोगौक्थिकयाज्ञिकबह्वृचनटाञ्ञ्यः। नटानां धर्म आम्नायो वा नाट्यम्"

Samāmnāya as given in the first line of the *Nirukta* implies *all* the meanings that the above discussion has shown. The first and the second meanings help us to translate the word Samāmnāya as, the 'traditional collection of *Vedic* words,' the adjective *Vedic* being supplied by the second meaning, as I have shown above. The third meaning is important, as it throws considerable light on the relation of the *Nirukta* to the *Nighaṇṭu*.

This third meaning of the word Samāmnāya, by which we understand 'sacred record handed down by traditional knowledge', decidedly proves that Yāska was not the author of the *Nighaṇṭu*. We should, therefore, receive with considerable caution and reservation Sāyaṇa's remark in his introduction to *Ṛgveda* which identifies the *Nighaṇṭu* with the *Nirukta*, viz., '*Nirukta* is a work where a number of words is given, without any intention to connect them in a sentence.' Thus he designates the above-mentioned catalogue of words—the *Nighaṇṭu* or the Samāmnāya—with the title *Nirukta*. But it must be now clear that the essential idea of the *Nirukta* is *explanation*, and it is this explanatory commentary on the *Nighaṇṭu* which is to be strictly known as the *Nirukta* ; while Yāska calls the *Nighaṇṭu* as Samāmnāya. Sāyaṇa's mistake is thus well explained by Max Müller in HASL 79, when he aptly remarks, 'As he preserved them by his commentary, it was natural that its authorship, too, should be ascribed to him.'

Moreover, ancient tradition ascribes the authorship of the *Nighaṇṭu* not to Yāska, but to Kāśyapa. Thus the *Mahābhārata* :—

" वृषो हि भगवान् धर्मः ख्यातो लोकेषु भारत ।
निघण्टुकपदाख्येन विद्धि मां वृषमुत्तमम् ॥

कपिर्वराहः श्रेष्ठश्च धर्मश्च वृष उच्यते ।
तस्माद् वृषाकपिं प्राह काश्यपो मां प्रजापतिः ॥

Here, then, the sage Kāśyapa has been referred to as the author of the *Nighaṇṭu*. And although it is extremely difficult to give any definite and accurate details about the personality of this Kāśyapa, the allusion suffices to confirm the view that Yāska was *not* the author of the *Nighaṇṭu* or the Samāmnāya. His work was to edit, and to *explain* (vyākhyātavyaḥ) the Samāmnāya.

AVESTA.

EREKHSHA THE ARCHER AND HIS ARROW.

BY B. T. ANKLESARIA.

The Avesta Tîstar Yast, whilst describing the speed of Tistri in its progress towards the ocean Vourukasha, introduces the story of " Erekhsha, the swift archer, the swiftest of Aryan archers," and of " the arrow which he darted from the mountain Khshuth to the mountain Khvanvat."

Albiruni gives the same legend with further details in his *Athārul Bākiya* whilst explaining the origin of the Tîragān feast of the Zoroastrians observed by the Parsis from times immemorial on the day Tīr of the month Tīr.[1] According to him, the arrow was shot by a noble, pious and wise man named Arish at the order of the Pīsdādian king Minōchihr while he was being besieged by Afrāsiāb in Ṭabaristān. Arish " bent the bow with all the power God had given him ; he shot the arrow and fell asunder into pieces. By order of God the wind bore the arrow away from the mountain of Rūyān and brought it to the utmost frontier of Khurāsān between Farghāna and Ṭabaristān ; there it hit the trunk of a tree that was so large that there had never been a tree like it in the world. The distance between the place where the arrow was shot and that where it fell was 1000 Farsakh."

Firdausi[2] in his *Sāh-ṇāmah*, refers in three places to ' Arīs ' and in one place to his ' arrow.'

According to the Mojmel al-Tawārākh Aris sîwâtîr

1 Albiruni's *Chronology of Ancient Nations*, Ed. Dr. Sachau, (1879), p. 205.

2 See " *Le livre des Rois par Abou'l-Kasim Firdousi*, publ., trad. et commenté ' par M. Jules Mohl. (1838-1878), Vol. 6, p. 178, l.236 ; Vol. 7, p. 36, l. 378 ; Ib. p.382, l. 324 ; Vol. 4, p. 408, l. 586.

is an ancestor of the Sassanian hero Bahrām Chūbīn[3].

Tabari refers to " the arrow of Arissātān in the battle between Manōchihr and Frasijāt " and to " Aris, the ancestor of Bahrām [4].

Nöldeke established the identity of the Avestan Erekhsha with the Persian Aris in an Article published in the *Zeitschrift der Deutschen Morgenlandischen Gesellschaft* (1881, p. 445 sq.)[5].

The Avestan 'erekhsha' can be equated with the Sanskrit *ṛiksha*, but the counterpart of the Avestan legend has not as yet been found from the Sanskrit Literature.

If we turn to the Greek mythology we find Heracles, the oldest and most illustrious of all heroes in the mythology of Greece. Heracles was the son of Zeus by Alcmēnē, the wife of Amphĭtrĭyon, whose form the god assumed while he was absent in the war against the Tēlĕbŏī. On the day on which he should have been born, Zeus announced to the gods that a descendent of Perseus was about to see the light, who would hold sway over all the Perseidæ. The child grew up to be a strong youth, and was taught by Eurytus to shoot with the bow, and by Castor to use the weapons of war. Amphĭtrĭyon, alarmed at his untamable temper sent him to tend his flocks on Mount Cĭthærōn. The Delphic oracle commanded him to enter the service of Eurystheus king of Mycēnae and Tīryns and perform twelve tasks which he should impose upon him. The poet Pīsander of Rhodes first

3 See *Extraits du Modjmel al-tewarikh* trad. par M. Jules Mohl in Journal Asiatique.

4 See *Geschichte der Perser und Araber zur zeit der Sasaniden, aus der Arabischen Chronik des Tabari*, von Th. Nöldeke (1879), pp. 271, 279.

5 See also *Études Iraniennes par James Darmesteter*, Tome II, pp. 220-221.

armed the hero with the club and the skin taken from the lion of Cĭthærōn. Heracles was previously represented as carrying a bow and arrows. Of the twelve labours of Heracles, which need not be recounted here, the tenth contains the legends of Heracles aiming his bow at the Sun-god, who marvels at his courage and gives him his golden bowl to cross the Ocean in, and of his dreadful struggle with the Lĭgyĕs when his arrows were exhausted and he had sunk in weariness upon his knee, Zeus rained a shower of innumerable stones from heaven with which he prevailed over his enemies [6].

From the long extract quoted from Nettleship and Sandys we have to note the points of comparison between the Avestan and the Greek legends:—

1. The Avestan archer 'Erekhsha' is to be equated with 'Heracles.'

2. The ocean *Vourukasha* whereto the star Tistrya moves might be the *Ocean* Heracles crossed in the Golden Bowl.

3. The mountain Khshaotha from where the arrow was darted by Erekhsha might be mount Cithæron.

We have further to trace the origin of the Northern Constellation Heracles, so well-known after the Greek hero for whom so many legends are interwoven in the Hellenic mythology.

Robert Brown, Jun., in his *Researches into the Origin of the Primitive Constellations of the Greeks. Phœnicians and Babylonians,* tries to prove that "Influences Sumero-Akkadian, Babylonian, Assyrian, Hittite, Phœnician, not to mention those of Egypt, are

6 Taken from *Dictionary of Classical Antiquities,* by H. Nettleship and J. E. Sandys (1899).

now allowed by all competent students to have made themselves felt in Hellas, borne on the wings of conquest, commerce and colonization."[7]

He further says that "the Greeks received the constellation names, and nearly all the stories connected with them, not from any savages but from the highly civilized Phœnicians, who, in turn, like the ancient Arabians, had obtained many of these names from the archaic civilization of the Euphrates Valley."[8]

Eudoxos of Knidos (cir. B. C. 403-350) mentioned in his work the *Phainomena* the primitive constellations of the Greeks. The treatise was afterwards versified by the poet Aratos, (Cir. B. C. 270), and Brown (Jr.) maintains that the "statements of Aratos in reference to the principal stars near the equator, exactly agree with the actual state of things at the vernal equinox, B. C. 2084, a date when the Euphratean formal scheme or chart of the heavens had been already completed."[9]

Whilst giving a description of the Northern Constellation of 'The Kneeler,' Brown notes (p. 34) that "this constellation is Euphratean in origin and was known as (Ak.) *Lugal*, (Bab.-As.) *Sarru* ('the King'). It originally represented the kneeling Sun-god, sometimes overcoming the Lion, sometimes shooting at the Demon-birds. Adopted by the Phœnicians, it became Melqārth-*Harekhal* (Hēraklēs), and is reproduced on coins." On p. 199 of his work, describing the coin-types, he gives the description of the figure of "*Hēraclēs* naked, kneeling and discharging *Arrow* ; *Club* on the ground behind him, before him two *Birds*" and again on p. 234 : "*Hēraklēs*, naked, running, holds *Lion*-

7 Vol. I, p. 2.
8 Ibid. p. 4.
9 Ibid. p. 15.

skin and *Bow* and strikes with *Club*, *Bow* and quiver."

From these notes it will be seen that whereas the Avestan *Erekhsha*, just like the Phœnician *Harekhal*, Hērāklēs, holds a bow in his hand and discharges the *arrow* whilst kneeling, the story of the two birds that are shot by Harekhal and of the *Lion-skin* on the naked body of Harekhal and of the Club cannot be traced in the Avestan literature.

The *Arrow* supposed to be shot from the bow of the *Kneeler* among the *Birds*, seems also to have been placed as a constellation of the Northern Hemisphere by the Phœnicians as Khaits, (the arrow) betwixt Nesher (the Eagle) and Nakhīr (the Dolphin).[10]

Although we do not find in the Vedic astronomical myths, an archer named ṛkṣa, who darted his heavenly arrow at any bird, we find in the Ṛgveda Sūkta VI (XXVII) the story of Kṛśānu the archer, pursuing with the speed of thought the hawk on his descent from heaven carrying away the Soma, stringing his bow and letting fly an arrow against him.

Summary :—It is possible with a further study of comparative mythology to prove that the myth of Heracles and his arrow, so well-known to the Greeks, which is rightly supposed by Robert Brown (Jr.) to have been derived from the Phœnician myth was originally existing in the home of the Aryans when the forefathers of the Vedic and the Avestan people were living together as one united community. The name of the Hellenic archer is traceable to the Avestan name but the Vedic name is quite different ; not only does the name differ, but the legend too seems to be based on a separate structure.

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10 The Avestan Ere+kh+sh+a can be equated with the Phoenician (H)+are+kh+a+l. Cf. Av. Th+w+â+sh+â= Pahl. S+p+â+hr.

AIRYANA VAEJO, THE CRADLE OF THE ARYANS, AND MĀZAINYA DAEVA, THE DEVAS OF MAZANDRAN, OR BRAHMANICAL DEVAS.

By J. D. Nadirshah.

Scholars have not as yet agreed as to the locale of the original home of the Vedic Brahmins, or even of the Aryan race, the stock, of which they were merely a branch. It is, therefore, desirable, to collect all the information direct or indirect, that can be found anywhere relating to them. With this view, all that I have come across in the Avesta and Pahlavi books about the cradle of the Aryans and the ancient home of the Vedic Brahmins is put together in this paper for the consideration of the Orientalists.

In V. I (*Vendidad* ch. I.) there is a list of sixteen specific districts describing the order in which they grew up one after another. These territories are apparently all situate in or about Persia, and no land known to be either of the Semetic or Tartaric race is included in the list which, therefore, seems to be a register of colonization only of some tribes of the Aryan race.

The land which, according to the list, flourished first is called Airyana Vaejo, Pahlavi Iran-Vej, signifying *the beginning or source of the Aryans*, from Av. Vaejo = Sansk. बीज *beginning or source.* It is declared in V. I. 1, that were not the land absolute made enjoyable, the whole of the corporeal world would have come to Airyana Vaejo. The phrase Vaṅhuyāo Dāityayāo *of the good Dāitya,* is always added in the Zend-Avesta to the name Airyana Vaejo. The original

place is, however, said to be excessively cold, having a winter of ten months, and a summer of two (V. I. 3-4). Here, the commentator notes that the winter is known to be of seven months and the summer of five. Notwithstanding the excessive cold the place is said to have become so overcrowded that, during the reign of King Jamshed's dynasty, the territory had to be extended thrice southward, each time at an interval of three-hundred years (V. II. 8-18).

From the above, one naturally concludes that the dynasty of Jamshed reigned for over 900 years. It must be noted here that the first King Jamshed, the founder of the dynasty, is called in the Avesta Yima Khshaeta, *Jamshed* the son of Vivanhat, Sansk. विवस्वत् (Yasna IX. 4, 5) and his descendants Yima Vivanhana, *Jam of the family of Vivanhat* (V. II, 9). We are told in V. II. 21, that Ahura Mazda who was celebrated in Airyana Vaejo held a meeting with Yima Khshaeta (Jamshed), also celebrated in Airyana Vaejo, forewarned him of the approach of the world-wide destructive winter, and counselled him to build the Vara (*a fortified town*) on a sufficiently elevated ground in order to save select men, animals, and plants from destruction.

We also learn that King Haoshyanha, one of the predecessors of King Jamshed I, struck down two-thirds of the Devas of Māzandran and of the marauders of Varenya (Gilan) Yasht V. 21, XIII. 137, XV. 8; whereas Jamshed merely subdued all the countries of the Devas (Yt, V. 24). The latter story has a support in the fact that the Hindus have deified Yama, the son of Vivasvat.

It seems that the last king of this dynasty was murdered by Spityura, nicknamed Yimokerenta, *the murderer of Yama* (Yasna XIX. 46), and the empire

was overthrown by Azhi-Dahāka, Pers. Azhdhā Zahāk, of Babylonia (Y. V. 29). Wherever several personages are described in the Avesta as praying for help, they are mentioned in their chronological order. Thus we find in Y. V. 29, XV. 19, Zahāk next to Jamshed and then Thraetaona, Sansk. त्रैतन, Pers. Fraedun the son of Āthwya, Sansk. आप्त्य, Pers. Atbin, who killed Zahāk (Yt. IX. 8). Fraedun was born in Varenya (Gilan) and he killed Zahāk (V. I. 18. Yt. V. 33-35, XV. 23-25).

According to Yt. IX. 14, Zoroaster who was renowned in Airyana Vaejo, first proclaimed there the *Ahunavar*, the oldest Gathic stanza. It inculcates that the *Ratu*, the spiritual ruler, is on an equality with the highest temporal ruler and that he is the Viceroy of Ahura Mazda in this world. Zoroaster was the son of Pourushaspa (V. XIX. 6, Y. IX. 13.), on the sloping-side of whose house was the Darejya (V. XIX. 4). It was in Airyana Vaejo that Zoroaster prayed to Aban for help in converting to Zoroastrianism King Vishtaspa, the son of Aurvataspa (Lohrasp), Yt. V. 104-105; and to Gosh (Yt. IX. 26-27) and Ashi (Yt. XIII. 45-47) in converting Queen Hutaosā.

In V. XIX. 43-47 we find a concise record of the discussion of some Daevas of a plot for the destruction of Zoroaster The names of the leading Daevas are given there. They are Indra, Sansk. इन्द्र, Sāuru, Sansk. शर्व and Nāoṅhaithya, Sansk. नासत्य. All these Daevas are deified in the Vedas. They sent out some other Daevas to murder Zoroaster. But the mission failed.

From the above scattered records in the Zend-Avesta one can easily infer (1) that the territory of Airyana Vaejo was in the neighbourhood of Māzandran and Gilan, and not far from Babylonia; (2) that King

Yima, son of Vivañhat, and the prophet Zoroaster, were natives of it; (3) that a fortified town Vara was built in it on a moderately elevated place; and (4) that the house of Zoroaster's father was on the bank of the Darejya.

These give us some vague idea of the situation of the territory. The Pahlavi Bundehashn, however, mentions some definite landmarks of its whereabouts. It tells us:

(*a*) Iranvej, in the side of Adarbāijan; M. B.[1] 82.

(*b*) Varjamkart of Iranvej; M. B. 80. It is here mentioned as one of the chief places of Khaniratha, the most renowned of the seven divisions of the world.

(*c*) Zoroaster when he brought the religion first proclaiming it in Iranvej; M. B. 92.

(*d*) The Dātyak river goes out from Iranvej and enters into Gorjastan (Georgia); M. B. 60.

(*e*) The Tort river, which is also called Koiri (the Kur) starts from the Black sea and pours into the Caspean; M. B. 61.

(*f*) The Daraja of Iranvej in the basin of which was the house of Pourushasp, the father of Zoroaster; M. B. 62.

(*g*) The Daraja River is a rivulet. Here there was the house of Zoroaster's father in the basin. Zoroaster was born there; M. B. 68.

We thus see that Iranvej was in Adarbāijan, contiguous to Georgia; that the Vara built by Jamshed was one of its chief cities; that of the two rivers passing through Georgia viz., the Kur and the Aras, the latter

1 M. B., the Pahlavi *Bundehashn* edited by the late Mr. Maneckji Rustomji Unwala.

represents the Dāitya of the Zend-Avesta ; and that the Darejya was in Iranvej.

From the above accounts we come to the conclusion that the ancient Airyana Vaejo, as it extended during the regime of the Yimas, consisted of Adarbaijan stretched northwards as far as the Caucasus of which a considerable portion is always clad with ice and snow. It is, therefore, no wonder that the original Airyana Vaejo is said to be excessively cold. But, on the downfall of the Yima dynasty, the kingdom was naturally broken up. The commentator's remark in V. I. 4, noted above that ' the winter is known to be of seven months and the summer of five, indicates that latterly the northern portion, chiefly consisting of Albania (Shirvan) was not included in Airyana Vaejo. It will not be out of place to quote here what Strabo says about Albania :—

" Perhaps such a race of people (the Albanians) have no need of the sea, for they do not make a proper use even of the land, which produces every kind of fruit, even the most delicate, and every kind of plant and evergreen. It is not cultivated with the least care; but all that is excellent grows without sowing and without ploughing, according to the accounts of persons who have accompanied armies there, and describe the inhabitants as leading a Cyclopean mode of life. In many places, the ground which has been sowed once, produces two or three crops, the first of which is even fifty fold, and that without a fallow, nor is the ground turned with an iron instrument, but with a plough made entirely of wood. The whole plain is better watered than Babylon or Ægypt, by rivers and streams, so that it always presents the appearance of herbage, and it affords excellent pasture. The air here is better than in those countries. The vines remain

always without digging round them, and are pruned every five years. The young trees bear fruit even the second year, but the full grown yield so much that a large quantity of it is left on the branches. The cattle, both tame and wild, thrive well in this country." (*The Geography of the Strabo* translated by Hamilton and Falconer, B. XI. C. IV. § 4).

The name Airyana is still preserved in the Pers. "Arrān, a tract of country situated between the provinces of Azerbāijan, Shirvān, and Armenia"; and to Arrāa belongs the city of Maughān ; (*vide the Geographical works of Sādik Isfahāni*, translated by J. C.). Maughān implies the country of the Maogs (Magi), a tribe to which belonged the prophet Zoroaster.

Latterly Airyana-Vaejo was called Media. It then included the district of Raghā, Gr. Rhagæ, Pers. Rae, which was also called Ragha Zarathushtri, *Ragha relating Zarathushtra* (Y. XIX. 18). Herodotus[2] informs us that "at an earlier period the Medes were all called Arians", and that "the Medes originally consisted of six tribes," one of which was the Magi.

About the Good Dāitya, now known as Aras, we read the following in the above-mentioned *Geographical Works of Sādik Isfahāni* :—

"Aras, a considerable river in the province of Shírvān : it rises in the mountains of Armenia, and is a fortunate or blessed stream, for, of the animals that happen to fall into it, most are saved".

The Darejya is now called the Darjai Rud or Karasu. It falls into the Aras.[3]

It starts from near the foot of the Savalan Dagh. The Persian dictionary *Burhane Qāte* writes about

2 *The Geography of Herodotus by* J. T. Wheeler, p. 287.

3 *V. Phillip's New Series of Travelling Maps.* Turkey in Asia; 38°43′ N. and 47°25′ E.

the Savalan: It is the name of a mountain near Ardabil in Azerbāijan; it has been a resort of monks and ascetics before and after the spread of Islamism; so the Moghāns (Zoroastrians)have deemed it a blessed place as they used to take oath by it".

According to Strabo, Media was divided into two parts, one of which was called the Greater Media, and the other Atropatene Media; the summer palace of the latter was at Gazaka (Tabriz), situated in a plain, and the winter palace in Vera, a strong fortress. Ecbatana (Hamadan) a large city was the capital of the Greater Media and contained the royal seat of the Median Empire. Here their kings passed the summer. Their winter residence was at Seleucia, on the Tigris, near Babylon (B. XI. C. XII. § 1-3). We, however, notice that the above Ecbatana is different from that mentioned by Herodotus. "This was erected upon a mountain, and consisted of seven strong and lofty walls, each one rising in a circle within the other. The ground was of an easy ascent, and each inner wall displayed its battlements above the other. The outside wall was therefore the lowest, and was about equal in circumference to the city of Athens. The innermost wall was the highest, and within it was the king's palace and also his treasury. The battlements of all these circular walls were of different colours. The first were white, the second black, the third purple, the fourth blue, the fifth bright red, the sixth plated with silver and the seventh or innermost one plated with gold. The people dwelt outside all round the walls".(*Geo. Hero.* p. 218).

Such is Herodotus's extraordinary description of Ecbatana. The story of the seven walls is considered by Colonel Rawlinson to be manifestly a fable of Sabean origin, the seven colours being precisely those employed by the Orientals to denote the seven great

heavenly bodies, or the seven climates in which they revolve. The hill of Takhti-Soleiman, which Colonel Rawlinson identifies with Ecbatana, rises one hundred and fifty feet above the plain, and its brow is still crowned with a wall thirty feet high, and having thirty-seven bastions in a circuit of a little more than three quarters of a mile.

"Media, as described by Herodotus, was generally level, but the region to the north of Ecbatana, and towards the Saspeires and the Euxine Sea, was very mountainous, and covered with forests, and abounding in wild beasts, yet including some pastures which were favourable to the grazing of cattle". This is the only passage in our author which will really assist us in discovoring the territory to which he referred. Rennell supposes that Media Magna, or Irak Ajami, only is meant; .... He, therefore, identifies the Ecbatana of Herodotus with the site of the modern city of Hamadan. Colonel Rawlinson, however, contends that only Northern Media or Azerbaijan is meant, and that the site of Takhti-Soleiman represents the Ecbatana of Herodotus. It is certain that our author's description already quoted refers to northern Media, and there are mountains to the north of Takhti-Soleiman, but none to the north of Hamadan.

The Ecbatana of Herodotus appears to be the same as the Vera of Strabo, and the Vara of the Zend-Avesta. Vera and Vara represent the same place as is manifest not only from the similarity of the names but also from their description, each being, in olden times, a fortified city in Atropatene and a royal seat.

The Province of Raghā was turned in the time of Zoroaster into a patrimony or church estate and was therefore called Raghā Zarathushtri. We are told in

Y. XIX. 18, that the countries ruled by other than the Zarathushtri, *Zoroaster and his successors*, have five *Ratus*, viz., (1) the head of the house, (2) of the family, (3) of the district, (4) the king, and (5) the representative of Zoroaster; and that Raghā Zarathushtri has only four, omitting the king. This indicates thatt he country of Raghā, situated on the south of Mazandran, had become a stronghold of Zoroastrianism in the time of Zoroaster.

Having thus determined the site of Airyana-Vaejo, the cradle of the Arian race, it is not very difficult now to find the ancient home of the Vedic Brahmins who formed one of its several branches.

Before the advent of the prophet Zarathushtra all the Arians in and about Persia worshipped the twin gods,[3] Mithra—Ahura-Berezat, the Vedic मित्र वरुण.

But on Zarathushtra proclaiming his religion which teaches that Ahura Mazda is the sole Creator of the Universe (Ib. P. 2), a strong constant enmity was raised between the partisans of Zarathushtra and the worshippers of the old deities. In the Vedas, these are called Devas, because they called their gods devas ; and those Asuras, because they called their God Ahura = Sansk. असुर. The word देव, Av. daeva was no doubt originally used by all the Arians in a good sense, as it radically signified *shining*, *illustrious*, and hence '*a god among men*, a king, a deity'. The Lat. *deus* and Gr. *Zeus*, which are akin to it, literally mean *the god*, like the Arabic Allah. By the way, it may be noted that like *Deva*, the Avestan *Ahura* also indicates a king (Yt. XIX. 77). Apte in his Sanskrit English Dictionary remarks under असुर, "In the oldest parts of the Rig Veda the term *Asura* is used for the supreme spirit and in the sense of

3 My paper on the Four Ahura Mazdas in the Avesta. Vol. VI, No. I of the *Journal of the Iranian Association*.

'god', 'divine'; it was applied to several of the chief deities such as Indra, Agni and Varuṇa. It afterwards, acquired an entirely opposite meaning, and came to signify a demon or an enemy of the gods". It is not surprising that Daeva is not used in its primitive good sense anywhere in the Zend-Avesta, as the whole of it was very bitter hatred between the Devas and the Asuras. An Asura is also called देवारि and देवशत्रु an enemy of Devas; इंद्रारि an enemy of Indra; क्रतुर an enemy of sacrifices, क्रतुद्विष् hating sacrifices, and दैतेय. The last denomination seems to signify, *relating to the Dāitya and people of the country watered by the above-cited Dāitya River.*

Of Daevas, the Māzainya Daevas are specially mentioned in the Zend-Avesta.[4]

Who can they be? Māzainya means *relating to Māzana.* When Sansritized, Māzana becomes माहन which indicates 'a Brahmin'. Māzainya Daeva, therefore, originally signified *the Brāhmanical Devas, the Devas of the land of the Brahmins.* This leads one to think that the name Māzandran, the ordinary rendering of Māzainya, is the Persian for an obsolete Avestan word Māzindrana,*the country of the Great Indra*, who was called देवपुत्र and देवराज, the king of Devas. We thus see that Mazandran was the ancient home of the Vedic Brahmins and that it was situated to the north of Raghā Zarathushri, the stronghold of Zoroastrianism. It appears that the Devas of Māzandran could not long hold their own against the inroads of the Asuras, and therefore migrated to India.

It is now easy to understand why देवभाग implies 'the northern hemisphere (opposed to Asurabhāga, the southern hemisphere)'; and why we read in V. XIX. 1,

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4 V. IX. 13; X. 16. Y. VXVII. 1; LVII, 32.

that Aṅhra-Mainyu comes from the north ; in V. VIII. 71, that by the purification ceremony the Druj finally escapes and hides himself in the north; and in Yt. XXII, that on the third day after death, the soul of the pious reaches a place where he finds a fragrant wind blowing from the south (para 7), and the soul of the wicked a region where he gets striking wind blowing from the north (para 25). It is useful to note here याम्य which signifies 'relating or belonging to Yama, southern'.

From records in the Zend-Avesta and the Pahlavi *Bundehashu*, I have thus traced the site of Airyana Vaejo, the birthplace of the primitive Aryans to the south eastern foot of the Caucasus. It was gradually extended southwards during the regime of the Yama dynasty. Having determined this, it was not very difficult to show that Māzandran was the ancient home of the Vedic Brahmans. In ascertaining this I am much assisted by the original significations of the terms *Mazainya Daeva* and Māzandran, as also by the account of Indra Daeva in V. XIX, and by his different attributive names.

AITAREYA & AĒθRA.

By I. J. Sorabji Taraporewala.

The word *aitareya* is found in Sanskrit only as applied as the name of a special branch of Vedic Literature consisting of a Brāhmaṇa, an Āraṇyaka and an Upaniṣad. It has always been explained as being the name of a Ṛṣi, the reputed author of these works and this strange name has been derived by our ancient etymologists from the word *itara*. A legend is given that this great Sage was the son of "another woman," *itarā*, i.e., not the legally married wife of his father. Stung by this slight, he gave himself up to religious practices and ultimately left behind him a great name as the founder of a great Vedic School.

This legend is a very fine example of popular etymology, quite on a par with the other etymological explanations given in ancient Sanskrit works. Palpably the story is a later invention to explain the meaning of a word which has been forgotten, for the word has not been found in any other context.

In Avesta, however, we meet a word which appears to be a cognate. The word is *aēθrya* which with the compound word *aēθrapaiti* is found in several passages. These seem to throw a lot of light on our word *aitareya*.

There does not seem to be any doubt whatever as to the meaning of these words; *aēθrya* means a pupil or a disciple (*Priester-schüler* as Bartholomae puts it[1]), and the compound *aēθra-paiti* means teacher, master, or spiritual guide (*Herr, Meister, der Priester,* according to Bartholomae[2]). Nairyosang in his Sanskrit version translates *aēθrya* by *śiṣya*.

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1. *Altiranisches Wörterbuch*. 20. 2. Ibd.

It is remarkable that in most cases both the words occur together. *Aēθrya*, in fact, occurs by itself only in one passage, *miθrəm...framrviṣa aēθryanām* (praise aloud Miθra before the disciples), Yt. x. 119. In all the other passages the word is found with *aēθrapaiti*. The most notable of these are :

antarə aēθrya aēθrapaiti (between the teacher and the pupil), Yt. x. 116.

aēθrapaitinąm aēθryanąm narąm nāirinąm[3] *iδa.... fravaṣayō yazamaide* (We worship here the Fravashis of the teachers and of the disciples......both male and female) Yas. xxvi. 7.

The word *aēθrapaiti*, however, is more important from our point of view, because it embodies the original word *aēθra*, of which the master (*paiti*) is the Teacher. As to the meaning of this *aēθra* there seems to have been some doubt in the mind of Bartholomae. He posits a word *aēθra* which he renders by "a priestly school" (*Priester-schule*) or "Learning" (*Lehre*) and he notes the etymology as doubtful[4]. And for reasons which he does not give, he remarks that the explanation of Haug in the *Zend-Pahlavi Glossary*, p. 129, is worthless (*ohne Wert*). As a matter of fact Haug's explanation is quite correct and it has besides the great merit of being the traditional explanation.

In the first place the word *aēθrapaiti* survives among the Parsis to this day in the word *ervad* (Per. *herbad*), the name applied to priests[5]. The word originally meant the master of *aēθra*. As to what this *aēθra* is, can be determined by a passage in the *Farvardin Yaśt*, (Yt. xiii. 105.)—*Māθravākahe Sāimuś-ōiś aēθrapatois hamiδpatōiś aśaonō fravaśīm yazamaide*

3. It may be remarked in passing that Zoroastrianism never made any difference between the sexes as far as religious rites were concerned. 4. Loc. cit. 5. The change of *pati* to-वद् or *-bad* is paralleled in Av. *maγupaiti*, Parsi मुबद्.

(We worship the Fravashi of *Mθąravākv* the son of *Sāimuz'i* the lord of *aēθra* and the lord of *hamiδ*). Now the word *hamiδ* reminds us directly of the Sanskrit word *samidh*, the fuel used for the sacred fire ; and hence naturally we should expect the *aēθra* to be connected in sense with the *hamiδ*. Darmesteter rightly following the tradition[6] renders these words as "master of the hearth" and "master of the sacrificial log." Bartholomae needlessly renders *hamiδpaiti*[7] as "master of assembly" and *aēθrapaiti* as "master of religious lore." The tradition, agreeing as it does with the Sanskrit word *samidh*, seems here to be the higher authority and we can therefore provisionally take *aēθra* to mean "the sacrificial fire."

In another verse of the *Farvardin Yaśt* (Yt. xiii. 97) we have the mention of *Saēna* who is mentioned as *satōaēθrya*. Bartholomae in his Dictionary[8] translates this as "having a hundred pupils" but, as Haug rightly remarks,[9] "it would be against all common sense to suppose that the only remarkable fact known of him was, that he had for the first time a hundred pupils on this earth. Such an insignificant fact (great teachers in the Orient do not count their pupils by hundreds but by thousands and tens of thousands) nobody would have thought worth commemoration. The statement that he was the first *satōaēθryō* indicates that the *satōaēθryō* must be a title of great honour which but few did obtain. If we take it in the sense of 'one who has a hundred fire places,' *i.e.*, one who has established a hundred places of worship or kindled a hundred sacrificial fires, then we have a fact which really deserved to be handed down to posterity. The Sanskrit term *śatakratu* may best be compared".

6. S. B. Evol. xxiii p. 200 (footnote). 7. Op. cit.. 1777.
8. Op. cit., 1556. 9. Loc., cit.

A third remarkable point in this connection is the use of the word *aiwyāṅhat* (in the sense of being under the charge of an *aēθrapaiti*) used in two places [10] in connection with the word *aēθrapaiti*. This word refers to the investiture of the sacred girdle after which the boy (or girl) in ancient Irān went to the *aērpatastan* or the religious school under the charge of the *aēθrapaiti*. The close parallel to the Indian custom of the Brahmacārī going to his Teacher after the *upanayana* ceremony is evident and need not be given in detail. The Indian disciple's chief work was the tending of the fire and looking after the daily sacrifices in the house of his Guru, and of course in Irān where the cult of the Fire was so strong there was doubtless the same practice. This fact also tends to prove that the *aēθra* was originally probably the "hearth" or "sacred fire of the household."

Bartholomae rightly traces the word *aēθra* to an Aryan prototype **aitra*. The probable Sanskrit equivalent would be *एत्र or *एतर[12] and the meaning was very probably "the sacred fire." The Avestan word *ātar* is cognate as also *āθravan* and the Sanskrit अथर्वन् and possibly अत्रि are also cognate. Haug traces the word to the root *idh* to kindle and thinks that the Greek αiθω (to burn) and αiθρα (a clear sky, Æther) are cognates.[14] He also says that the meaning of "pupil" was acquired by *aēθrya* "by a transference." Very likely the "pupils were trained to tend the fire hence the word came to be applied to them."[15]

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10. Nirangistān II and 16. 11. *Wörterbuch*, 20. 12. Jackson, Avesta Grammer. § 55. 13. In Ṛv., II, 8. 5 the word अत्रि is used in the sense of fire and is thus explained by Sāyaṇa, although his etymology of the word is fanciful. 14 Loc. cit. 15. Loc. cit.

Hence the legend of *Itarā* goes back to its proper place as an example of popular etymology and the aitareya School of the Veda becomes, what it ought to be, "the lore of the sacred sacrificial fire." This conclusion, besides on the grounds referred to above, is amply borne out by the contents of the *Aitareya Brāhmaṇa.*

THE
AVESTAN ARCHANGELS & SANSKRIT DEITIES
A COMPARISON.

By A. K. Vesavewala.

It has been proved by history and the Avestan and Sanskrit Studies that in times immemorial the forefathers of all the Iranians, Hindus and Europeans had a common home in Aryana Vaija and later on they separated themselves into different tribes and inhabited a greater part of the eastern, western and southern regions. The Aryana Vaija of those days was not the modern Iran (Persia) and it is not clearly known where this place was located, though it is recently supposed to be somewhere in the Arctic regions where all the Aryans appear to have stayed once. They seem at first to have been all united but afterwards they separated themselves owing to religious differences. The causes which led to their separation were mainly of a social, political and religious nature. The Aryan tribes, after they had left their original home which was in all likelihood a cold country, as we find it described in the second Fargard of the Vendidad, mostly led a pastoral life and sometimes cultivated some patches of land for their maintenance. In this state we find the ancient Aryan community throughout the earlier part of the Vedic period. Some of these tribes whom we may style the Iranians proper became tired of this nomadic mode of life and after having reached Bactria and the place between the Oxus and the Zacxartes, seem to have forsaken the pastoral life of their ancestors and their brother tribes and become agriculturists. The religion

of these new tribes consisted at first in worshipping all the good elements of nature separately, while that of the old Aryans as opposed to the Iranians, was branded as a source of mischief by the latter tribe, because some of their Daevas presided over natural objects possessing evil qualities. The Ahurian religion of agriculture was instituted which separated thenceforth for ever from that of their Aryan brothers. The peculiar form of this Ahurian religion was mainly due to one great personage Spitama Zarathustra. The religion of Zoroaster taught the worship, not of many gods, but only of the one true god Mazda (Mazdayasna as opposed to Daevayasna). The founders of this Ahurian religion first introduced agriculture and made it a religious duty and commenced war against the Daeva religion. The struggle had begun for many centuries even before Zoroaster, but it can never be doubted that he gave a finishing stroke to their idolatry and separated the contending parties from one another completely. He applied the term Ahurmazda to God and hated the Daeva-worshipping religion by distinguishing his religion as Vi-Daeva i. e. "opposed to the Daevas." Thus these two tribes separated, but both of them kept the names of their angels and heroes permanent in order to show their respect and reverence for them and so we find similar names both in the Avesta and the Vedas, as the Avesta *Mithra*, Sansk. *Mitra;* and Avesta *Verethraghna*, Sansk. *Vṛtrahan;* Avesta *Haoma*, Sansk. *Soma.* They are all depicted as good in both the scriptures, whilst the Danu tribe plays an evil part in either. With respect to the other names, though some are to be found in the scriptures of both the communities, still they do not stand in the same light, i. e. those that are represented as good in the Avesta are reckoned as evil in

the Vedas. e. g. the Avesta *Ahura* and Sansk. *Asura*, and those that are represented as evil in the Avesta are characterised as good in the 'Vedas. e. g. Avesta-*Indra*, Vedic-*Indra*. It is said that the Brahmans were not satisfied by praising their forefathers as men but extolled them as divine beings or angels as Avesta *Yima*, Sansk. *Yama*.

Angels in the Avesta are all predominant over the good creation of Ahura. They are represented as shapeless and undying and shining. They may be divided into two groups (a) those that resemble the Vedic gods and other nations of antiquity and (b) those that are purely Iranian. Every archangel is supposed to represent an abstract conception which is generally indicated by the term itself and every angel is supposed to be a minor divinity presiding over a certain beneficent natural object. For example *Ater*, the angel of fire, presides over fire also. A very great homage was paid to fire so much so that no important ceremonies could be performed without it. The Yazatas (angels) stand in the Vedas under the Name of the Daevas. The Devas is the name given in all the Vedas and in the whole Sanskrit literature to the divine beings or gods who are the objects of worship on the part of the Hindus even to the present day. In the Avesta from its earliest to its latest texts and even in Persian literature, Daeva (Per. Div.) is the general term for an evil spirit, a fiend, demon or devil who is hostile to all that comes from the Almighty and that is good for mankind. In the confession of faith recited by the Parsis, a Mazda worshipper is distinctly said to be " Vi-daeva " against the Daevas.

In the Vedas, especially in the *Atharvaveda* and the Brāhmaṇas, the gods number thirty-three (trayas triṃśad

devāḥ) in all. The names of the individual Vedic gods are not the same throughout. In the *Aitareya Brāhmaṇa* III, 22 they are enumerated thus, eight Vasavas, eleven Rudras, twelve Ādityas, one Prajāpati, and one Vaṣaṭkāra. Instead of the last two we find Dyāvā-Pṛthivī (heaven and earth) mentioned in the *Śatapatha Brāhmaṇa* IV, 5, 7, 2. In another passage of the same work XI, 6, 3, 5, we find Indra and Prajāpati mentioned as the last two. In the *Rāmāyaṇa* III, 3, 12 the two Aśvins are mentioned instead of them. With these thirty three Devas of the Vedas we may compare the thirty three Ratus or chiefs for maintaining the best truths as they are instituted by Mazda and promulgated by Zoroaster. The difference between the Avestaic Yazata and the Vedic Devas is that, whereas the Avestan Yazatas show only good attributes and are represented as shining and immortal, the Vedic Devas are depicted as injuring mankind to a very large extent. The ancient Indians worship the Devas with the main object that they may escape scot free from their destructive influences; as for instance, they worship Yama, the Demon of death, with a view to be free from his pains. On the other hand the Parsis are enjoined to fight heroically against their difficulties. Again, the Vedic Devas are not represented as shining and immortal. They assume a human form and involve themselves in these worldly attractions and pleasures. Again, the ancient Indians represent a pious dead man as a divine being, as Yama, Sansk. Yama being the first man to die was considered a god after his death. Again, the Vedic gods are not the direct productions of the Almighty but they have parents like worldly men, as we find Indra having his parents in this world. Another great difference is that human sacrifices

were offered to the Vedic gods, whereas in Avesta no such sacrifices seem to have been offered to the Yazatas. In the Vedas we find horses and sheep offered as sacrifices to Indra and Agni. Now let us come to our main point.

According to Avesta the first and most worthy of adoration is Ahura, the wisest and the greatest. He is creator of the invisible as well as the visible world. It is he himself who inspired Zoroaster with the holy religion. In his being, Ahura-Mazda is a spirit. He is repesented as the Creator, the supporter and the ruler of the whole universe. His character, as depicted in the holy Gathas, is the highest and noblest conception of spiritual sublimity. He is the maker of the sun, the moon, the stars, the earth, the waters, the trees, the winds, the clouds, man, the Producer of the day and night, without beginning and without end.

According to Pahlavi writings He is Omniscient (vispa-akas), omnipotent (vispa-tuban), the supreme Sovereign (vispa-khudai), All-beneficent (vispa-sut), All-in-all (vispan-vispa.) Many different sublime attributes and qualities of Ahura are found in Ahura Mazda Yaśt, which go to prove that the honour and dignity of the godhead of Ahuramazda is fully upheld and maintained in Avesta. In the Vedas, too, we find "Asura" used in good and elevated sense as in the Avesta. In *Ṛgveda* the chief gods Indra, Agni and others are all named Asura. The chief gods such as Indra (Ṛv. I, 54, 3), Varuṇa (Ṛv. I, 24, 14), Agni (Ṛv. IV 2, 5, VII 2, 3), Savitṛ (Ṛv. I, 35, 9), Rudra or Śiva (Ṛv. V 42, 11,) &c. are all honoured with the epithet Asura which word means "the living, spiritual," signifying the divine in opposition to human nature. In the plural it is even used for all the gods, as

in (Ṛv. 1 108, 6) "This Soma is to be distributed as an offering among the Asuras." by which word the Ṛṣi means his own gods, whom he was worshipping. We find one Asura particularly mentioned who is called " Asura of heaven " (Ṛv. V, 41, 3). Heaven itself is called by this name (Ṛv. I, 131, 1). From all this we find that Asura was used in a good and elevated sense in the Vedas, not in the singular only but also in the plural. Zoroaster used (applied) the word only for one Deity and despised the worship of many gods. Later on, the word seems to have assumed a bad meaning and was so applied to the bitterest enemies of the Devas (gods) with whom these Asuras are depicted as always fighting. The Asuras were then supposed to be the constant enemies of the Hindu gods, and they make attacks always upon the sacrifices offered by the devotees.

The second archangel mentioned in Avesta next in order after Ahura is *Vohu mano* who is regarded as the essential faculty in all living beings of the good creation. He is also regarded as the guardian in Pahlavi. The literal meaning of the word Vohu-mano is " the good mind." The opposite of him according to Avesta is Akem-mano, mentioned in *Vendidad* Fargarad XIX 4. He produces all bad thoughts in men. We do not find any equivalent of Vohu-mano in the Vedic literature. After Vohu-mano comes *Asha Vahishta*. This term means "the best righteousness", the first part whereof viz. Asha means "rectitude, righteousness" and the second part Vahishta means. "the best." In the later Avestan literature he is also the archangel presiding over fire, the reason being that fire is the symbol of purity. *Vendidad* XIX 43 depicts Indra as the opponent of Asha Vahishta. Thus Indra

the chief god of the Brahmans, the thunderer, the god of light and god of war, one for whom the Ṛṣis, the ancient founders of Brahmanism, squeezed and drank the exhilarating Soma beverage, is expressly mentioned in the Avesta passage above referred to in the list of demons. Therein he stands as one of the six associates of Angra-mainush and also as the opponent of Asha Vahishta. He is the opponent of righteousness. But in the Vedas, he is considered as the great god and is placed almost on the same level as the Avestan Ahura. He reigns over the deities of the intermediate region or atmosphere. He fights against and conquers with his thunderbolt, the demons of darkness and in general he is a symbol of generous heroism. In the Vedas many hymns are recited in his praise. He is the head of all and fights against the wicked for the good of mankind. Everyone is afraid of him. He protects the Aryans and guards their flock. He fights with the Asuras in order to save the wives of the Devas from falling into their hands and also to protect men and cattle against drought. His chief power lies in his material strength. The Devas Mitra, Agni, Marut etc. help him in his battles. Although he is considered so very exalted yet he is not uncreated. "A vigorous god begot him, a heroic female brought him forth." We also find his parents mentioned in the Vedas. He fights with Vṛtra and Ahi, who are the demons of drought and inclement weather and overpowers them both. He also fights with Dasyus and Gandharva. He is represented as a warrior. He has vigour in his body, strength in his arms, thunderbolts in his hands and wisdom in his head. Different appellations are given to him. He is sometimes called the Valabhid, because once he protected the cattle of the Brahmans from the

hands of the demon Vala. Another name is "Vṛtrahan" which corresponds to Av. Verethraghna. The chief triad among the Hindus is that of Agni, Sūrya and Vāyu in which Indra took the place of Vāyu and was represented as the demon of storm, thunder and lightning. Like human nature, however, he is a slave to his passion. He has got a wife called Indrāṇī in the Vedas and several children. According to the *Mahābhārata*, he even seduced, or at all events, endeavoured to seduce Ahalyā, the wife of the sage Gautama. His libertine character is also shown by his frequently sending celestial nymphs to excite the passions of holy men and to beguile them from the potent penances which he dreaded. He is wrathful with those who do not dedicate to him the drinking beverage called Soma. Although he obtains victory over his rivals, still he is sometimes afraid of them and especially of the Brahmans. Owing to this, his position is, in the later Vedas, so much depreciated that even his existence is doubted.

The fourth archangel is *Khshathra Vairya* Sharevar, (which in the later literature), presides over metals in the Avesta and is the giver of wealth. The name literally means the desirable strength or sovereignty. Khshathra in Gatha means power, strength or authority and Vairya means desirable or wished for. It is found in Pahlavi as Khshathra or Shatrevar, in Persian as Shahrivar.

" This personified abstraction in its spiritual sense" rightly observes Professor Jackson " represents an embodiment of Ahura Mazda's might, majesty, dominion and power, or that blessed reign whose establishment on earth will mean the annihilation of evil." The pious Zarathushtra desires strength from god for his disciples so that they may give him help in performing the

marvellous achievement of this world viz., propagation of the religion. "Khshathra in short denotes the rule of Ahura Mazda as is apparent from Yasna Ha 41 sec. 2. "May we attain to thy Good Kingdom, O Ahura Mazda, for all eternity." In the world of material things Khshathra Vairya is represented as presiding over metals, Saurva (Vedic Śarva) occurs as the opponent of Khshathra Vairya in *Vendidad* Fargarad XIX, in which context, he is mentioned as a perishable cold-producing demon and an assistance to Indra and Anghromainush. The Vedic Śarva is called the Śiva of the Hindus. His work is to produce mismanagement, oppression and drunkenness in men. Among the Hindus he is considered to be a great god.

In *Bundehishna* we find the word Savar or Sovar for the same. In the Vedas his appearance is depicted as very dreadful. He wears a garland of the human skulls. In the exercise of his function of Universal Destroyer he is said to destroy not only all created beings but even Brahmā, Viṣṇu and the other gods whose bones and skulls he wears as garlands. He is compared with the demon of death. Later on he is called the chief of the spirits and witches. Śiva is the term unknown to the Vedas but the one frequently used is Rudra. In the *Rāmāyaṇa* Śiva is a great god but the references to him have more of the idea of a personal god than of a supreme divinity.

One triad of divine manifestation among the Hundus is that of Brahman (Creator), Viṣṇu (Protector) and Śiva (Destroying spirit). There he is found as a destroyer. In this capacity he can to a certain extent be compared with Angromainush, the evil spirit.

After Khshathra Vairya comes *Spenta Armaiti* (Spendarmad) " the bountiful Armaiti " who represents

the earth. The name literally denotes "bountiful righteous thinking" the mind which keeps itself always within the bounds of what is right and good. By this is not only to be understood wisdom but something even more than that viz, "humility and quiet resignation to the divine will." The earth has two names in the Avesta (1) Spenta Armaiti and (2) Zem Hudão. The first is one of the names of the Amesha Spentas and the second is the name both of the earth and of its Yazata. Ervad Sheriarji Bharucha translates it as "beneficent love". The root meaning of Armaiti is also "devotion". She represents the pious and obedient heart of the true worshipper of Ahura Mazda who serves god alone with body and soul. Materially Spenta Armaiti is represented as the protectress of the earth. This part of her nature appears more clearly in the legend of Yama, according to which, under that king the human and animal creations having multiplied themselves and the earth having consequently become too narrow for them, he prayed to Spenta Armaiti to extend. Along with this idea, one may inquire as to how humility could be made to be the protectress of the earth. This comes from the idea of regarding the earth chiefly as the humble suffering one which bears all, nourishes all, and sustains all. Armaiti is found as a female spirit in the Vedas also. Here, too she stands under a double aspect. In *Ṛgveda* VII, 1, 6 ; 34, 21 Aramati is used in the sense of "devotion". In the same book (X 92, 4, 5) we find Aramati used also in the sense of earth. "From this we see" observes Dr. Haug "that in the Vedas as well as very often in the Avesta, we cannot with certainty separate the abstract from the concrete significance". She is called a virgin in the Vedas who comes to Agni with

the offerings of butter every morning and evening (Rv. VII, 1, 6.). In the Gathas she is called the daughter of Ahura Mazda. Naonhaithya, Vedic Nāsatyās, is the name of an evil spirit in the Avesta. He is the demon of dissatisfaction and illusion. He is alsō Aśvin in the Vedas and an opponent of Spenta Armaiti. In *Bundehishna* he is called "Naonhas". Here we find his another name Taromat, which is exactly the opposite of Spenta Armaiti. He is mentioned as an evil Daeva along with Indra, Sauru, Tairich, Zairich etc. in *Vendidad* Fargarad 19-42 and *Vendidad* Fargarad 10-9. In Naonhaythia daeva we readily recognise the Nāsatyās of the Vedic hymns. He is herein depicted as the companion of Indra, Shurva and Aesma.

Haurvatat and *Ameretat* (Khordad and Amardad), the two last archangels, form an inseparable pair. They appear almost constantly united and the presence of the one announces that of the other. The link which unites them is as close as that of Mitra and Varuṇa in Vedic poetry. Their names signify invulnerability or totality and immortality. They rule over the water and the plants respectively in the later literature. They represent the preservation of the original uncorrupted state of the good creation and its remaining in the same condition as that in which it was created by God. They are generally both mentioned together and they express a single compound idea. Being the tutelary deities of waters and plants, they are quite naturally appointed to preside over the nourishment of mankind. The abstract significance of both these Amesha Spentas is quite clear, as we know the water dispenses health and the wholesome plants are created by God to dispel sickness and death; hence both of them form as if it were an inseparable

pair. Haurvatat is derived from *haurva* meaning entire, whole and *tât* is the abstract suffix; so it seems that Haurvatat corresponds to the Latin Word Universitas meaning healthiness, totality. Ameretat is derived from *a* and *mereta* meaning not dying, the *tât* being the abstract suffix; so the whole meaning is immortality or indefinite recoil from death. The adversaries of Haurvatat and Ameretat are Tauru and Zairicha, the demons of sickness and decrepitude or feebleness. In the Avesta *Vendidad* they are considered to be the companions of Anghra Mainush. As Haurvatat and Ameretat acquired the attributes of the protectors of water and vegetation, so their opponents appear most likely to be the demons of thirst and hunger. The derivation of Zairicha corroborates this statement. It comes from 'Zar' to weaken or to fall down and hence this demon produces weakness, debility and death among mankind and so whilst Ameretat increases the growth of trees and food, this demon Zairicha produces aridity and barrenness and scarcity of food, for living creatures. According to *Bundehishna* and *Dādestāni Dini* Zairicha produces poison. In the Vedas we find Brahma producing several angels and the evil powers all fight against them and just as Zairicha is considered to be the opponent of Ameretat, so Zaras is supposed to be the evil power against vegetation and plants. In *Dādestāni Dini* Zairich is considered to be the producer of poison.

PALI AND BUDDHISM.

KING JANAKA AND THE BURNING OF MITHILĀ.

(FROM PĀLI & JAIN SOURCES.)

BY C. V. RAJWADE.

I.

The earliest mention of King Janaka in the Brahmanical texts is in the Śatapatha Brāhmaṇa. His name occurs there in various places (xi 3.1.2 ; 4.3.20 ; 6.2.1 &c). But the famous passage which is frequently repeated in later texts is xi. 6.2.1. There it is said of King Janaka of Videha, that he once met with some travelling Brahmins named श्वेतकेतु आरुणेय, सोमशुष्म, सात्ययज्ञि and याज्ञवल्क्य and asked them as to how they offered the अग्निहोत्र oblation. They replied in different ways. The King was satisfied with the answer of याज्ञवल्क्य and gave him three hundred cows etc.

He is mentioned in some of the other Brāhmaṇas also as liberal in his gifts and famous for his philosophical discussions on Brahman.

Of the Upaniṣads the *Kauṣītaki* and *Jābāla* have merely passing references to him. But almost the whole of the 4th Adhyāya of *Bṛhadāraṇyaka Upaniṣad* speaks of his philosophical discussions mainly with Yājñavalkya.

These are all related in the same way as the narratives of *Sat. Br.* and show the same familiarity with the subject. *Bṛh. Up.* 4.3 especiallv is interesting as it is a continuation of *Śat. Br.* xi. 6.2.1. given above.

In the *Mahābhārata* there is a very large number of narratives about him. But a tone of respectful distance is already visible in them and sometimes he becomes almost mythical. The famous stanza viz.

सुसुखं बत जीवामि यस्य मे नास्ति किंचन ।
मिथिलायां प्रदीप्तायां न मे दह्यति किंचन ॥ xii 219,50

is many times abruptly ushered in as having been formerly sung by the King of Videha. All these narratives are further, with only one exception (iii. 8089), restricted to the twelfth book Śānti-parvan, where there is free scope for the addition of any matter of a philosophical import. Thus besides the famous stanza about the burning of Mithilā we meet with narratives of discussions of the King with various persons. Adhs. 220–223 are very important. Janaka is there said to have employed a hundred teachers of various sects and tried hard to find out the 'soul'. At last Pañcaśikha is brought in who preaches the Sāṅkhya doctrine to the King. This is interesting as the fact of the King's ever having been conversant with the Sāṅkhya doctrine has not been mentioned before in the Brāhmaṇas and Upaniṣads. And in the treatment of the principles of the Sāṅkhya doctrine, there is clearly visible a dominating influence of the tenetsof Buddhism. There are other Adhs. also, treating of Sāṅkhya as preached to Janaka.

But the passage that is of great importance to us for our present enquiry is contained in Adh. 18 which records the conversation of Janaka with his wife, as he was about to renounce the world. In order to stop him from doing so, she uttered the following stanzas

धनान्यपत्यं मित्राणि रत्नानि विविधानि च ।
पन्थानं पावकं हित्वा जनको मौण्ड्यमास्थितः ॥ ४ ॥

....

श्रियं हित्वा प्रदीप्तां त्वं श्ववत्संप्रति वीक्ष्यसे ।
अपुत्रा जननी तेऽद्य कौसल्या चापतिस्त्वया ॥ १२ ॥

and asked him to stay in worldly life and give gifts, for that was the best Dharma and renunciation was of no use.

What connection this legend has with the famous stanza will be apparent when we treat of the Buddhist and Jain parallels in the next two sections. Let it suffice here to note the very abrupt beginning and close of the narrative and its omission to give a connected account as to the renunciation of the great King.

II.

There is no mention of King Janaka in the Buddhist Tripiṭaka except in the Jātaka book. But there is a Gāthā in the *Dhammapada* which closely resembles the famous stanza. It is as follows :—

सुसुखं वत जीवाम येसं नो नत्थि किञ्चनं ।
पीतिभक्खा भविस्साम देवा आभस्सरा यथा ॥ २००

In the Chinese and Tibetan versions of the *Dhp.* there is an additional verse given preceding this Gāthā, which appears as an exact translation of the famous stanza in Mbh.

The Jātaka that narrates the story of King Janaka is the Mahājan akajātaka (No. 539). At Mithilā in Videha reigned a King called Mahā-Janaka He had two sons Ariṭṭha and Pola-janaka by name. After the death of the King the first ruled the country and imprisoned his brother. But the latter escaped by means of the 'truth ordeal', attacked Ariṭṭha with a large army and killed him. The queen of Ariṭṭha fled from the city and with the aid given to her by Śakra went to Kālacampā where a Brahmin took care of her. She gave birth to a son at that place, who was named Mahājanaka. When he came of age he set out for Suvarṇabhūmi with desire to regain his father's kingdom. The prince reached Mithilā and found that Pola-janaka was dead. The ministers wanted to choose a new King as there was no heir to the throne. For this purpose they made

ready a chariot according to instructions left by the dead King and carried it all over the city. It went and stopped just before the prince who had arrived there, and thus he was duly chosen. Another condition laid down by the late King was that the man selected should be able to win the hand of his daughter.

After a time his queen gave birth to a son. Once the King went to a garden where stood two mango trees, one laden with fruit and the other devoid of any. He took off a mango fruit from the former tree and began to eat it. His retinue thereupon ransacked that tree and left no fruit on it. On his way back the King found what had happened. He reflected in his mind that the tree was ruined on account of its fruit, while the other was quite safe. Thus in this world, it is only those that have possessions that are beset with fear: 'Sakincanasseva bhayan na akincanassa.' With this thought he resolved to renounce the world. He left the palace just at the time when the Queen was coming to see him. Knowing what had happened, she followed the King, and in order to tempt him back into worldly life, continued to show him fire and smoke on everyside and said to him, "Here are the flames that are burning down all your treasures. Come back, O King! May not your wealth be destroyed!" To this the King calmly replied

125 सुसुखं वत जीवाम येसं नो नत्थि किञ्चनं।
मिथिलाय डय्हमानाय न मे किञ्चि अडय्हथ ॥ 245

The Queen then tried to win him over by various other expedients. She showed him that thieves were plundering his city, to which the reply was

127 सुसुखं वत जीवाम येस नो नत्थि किञ्चनं।
रट्ठे विलुंपमानम्हि न मे किञ्चि अजीरथ ॥ 247

128 सुसुखं वत जीवाम येसं नो नत्थि किञ्चनं ।
पीतियक्त्वा भविस्साम देवा आभस्सरा यथा ॥ 248 (=*Dhp.* 200)

The queen and the people still tried to follow him. On his way to Himālaya the King met Narada and Migājina and at last reached the city of Thūnā, where he began to eat a morsel of flesh left by a dog, at which the Queen was disgusted. But he calmly replied that all food was pure alike. *Sabbo bhakkho anavajjo.* Going further they saw a girl, on one of whose arms there were two bangles and on the other only one. The two bangles on one arm jingled while the one on the other was silent. In order to convince the queen of the advantage of solitary life, the king asked the girl how the two made noise while the one was silent. She replied.

157 इमस्मिं समण हत्थे पटिमुक्का दुनीधुरा ।
संघाता जायते सद्दो दुतियस्सेव सा गती ॥ 277

158 इमस्मिं समण हत्थे पटिमुक्को एकनीधुरो ।
सो अदुतियो न जनाति मुनिभूतोऽव तिट्ठति ॥ 278

159 विवादमन्तो दुतियो केनेको विवादिस्सति ।
तस्स के सग्गकामस्स एकत्त उपरोचतं ॥ 279

Further they saw a fletcher heating and straitening an arrow by closing one eye, On being asked the reason of this he replied, "viewed with both the eyes, the object appears large, with one eye, one can hit the exact spot in the object" and repeated stanza 159. Seeing the king leave her, the queen fainted, but the king went on. The queen built shrines at the various places where they had stopped, returned and renounced the world.

III.

In the sacred books of the Jains, the name of Janaka does not occur at all. We have instead legends about a king called Nami which correspond to those

about king Janaka in the Brahmanical and Buddhist books. Nami in Jain scriptures is one of the four Pratyekabuddhas whose accounts are given in the commentaries to the ninth Adh. of the *Uttarādhanasūtra* which is styled Namipravrajyā. He seems to correspond to king Nimi of the Brahmanical and Buddhist books. There is mention of a king of that name in the *Pañcavimśabrāhmaṇa* (XXV.10.17). The Mahābhārata speaks of Nimi as an ancestor of Janaka (ii.8, 9; xiii.138) and his name frequently occurs in the Purāṇas. Thus in *Viṣṇu* (iv-5-6) it is told how once Nimi and Vaśiṣṭha cursed each other. The same story is told in *Bhāgavata* (ix.13.1-13).

In the Buddhist scriptures, a whole Jātaka (Nimijātka No. 541) deals with his account. He is said to have been an incarnation of the famous king Makhādeva who renounced the world on seeing a grey hair appear on his head He became pious and liberal, whereupon Śakra in fear came down to see the king, who asked him about the fruit of Dāna and Brahmacarya. Śakra then asked his charioteer Mātali to show heaven and hell to the king, which was done. Śakra finally asked the king to partake of the joys of heaven, but he declined. He came back to the earth and renounced the world. His son Kalāra-Janaka then sat on the thorne.

The commentary to the Uttarādhyayana gives the introductory account of the life of Nami upto the point where the text of the 9th Adh. begins. Its substance is as follows :-

At Sudarśanapura in the Mālavaka country, there reigned King Maṇiratha. His brother was appointed Yuvarāja. He had a wife Mayaṇarehā and a son. The king once fell in love with Mayaṇā but as she would not consent he tried to kill her husband. So when

once the Yuvarāja was sporting in a garden with his wife, the king went there, killed him and pretended that this happened through mistake. Madanarekhā fled to the forest, where she gave birth to a son. While she went to an adjoining lake to wash herself, a water-elephant threw her up with his trunk. A Vidyādhara caught her up, and would not allow her even to fetch her child.

The king of Mithilā found the child and reared him up with the aid of his wife. Madanarekhā outwardly consented to the advances made by the Vidyādhara and both went to Nandisvara and listened to the sermon; when the Vidyādhara was imbued with the spirit of religion he left her. The saint who was preaching then told her the former story of her son in detail. Mandanrekhā was taken by a god to Mithilā where she renounced and was named Suvvayā. Her son was named Nami. Maṇiratha died by serpent-bite, just the night he killed his brother. So Candrayaśas was placed on the throne of Sudarśanapura. Once the white elephant of Nami wandered in the town and was caught by Candrayaśas whence ensued war. But Suvratā revealed her identity to Nami and made peace between the two brothers. Candrayaśas then renounced the throne in favour of Nami.

Once there was an intense burning sensation in the body of king Nami. The queens began to anoint him with sandle juice, but their bangles jingled which troubled the king a great deal. So they broke all their bangles leaving only one on each arm, when all noise was stopped. From this the king realized that Saṅgha was the cause of all pain in this world, and so he renounced.

[F. O. C. II 16.]

संबुद्धो पव्वइओ बहुयाण सद्दयं सोच्चा ।
एगस्स असद्दयं वलयाण नमीराया निक्खंतो महिलाहिवो ॥

Here the commentary is over and the text begins. King Nami renounced the world and there was a great commotion in Mithilā at this. To test him, Śakra came in the guise of a Brahmin and asked the king, "Why is there so much commotion in the city?"

Nami—There is a Caitya tree in Mithilā full of fruit and flowers. It is shaken by the wind, and these creatures, the birds, are crying being helpless (9-10).

Śakra—Here is fire and wind, your palace is being burnt, why do you not look at your harem? (Here Śakra showed the king the ravages done by fire and wind).

Nami—सुहं वसामो जीवामो जेसिं मो नत्थि किंचणं ।
मिहिलाए डज्झमाणीए न मे डज्झइ किंचणं ॥ 14

Since I have left wife and son and am without any business and have turned a Bhikṣu I have neither likes nor dislikes.

Then follows a long conversation in which Śakra tries in various ways to tempt the king back into worldly life but the king answers all his arguments and is quite determined to renounce (17-49). Śakra at last expressed his great surprise and then left off the guise of a Brahmin, bowed down to the king, praised him and went away.

* * *

We may now try to see what results we obtain by the comparison of the three versions. One thing is clear enough at the outset by being common to all the versions, that Mithilā was never actually burnt. It is not a historical fact at all. Further it appears that it was a mere show put forth to tempt the king, although this fact is absent from the Mbh. version. There seem to have been two different accounts of the

temptation to which the king was subjected. In one it was Śakra that came down from heaven specially to test the king, and in this the Jain account seems to be more ancient. As shown before the Mbh. story is a mere makeshift. According to the other account, it was his queen that tried to tempt him back into worldly life. This is recorded in an isolated chapter (xii-18) of the *Mbh.*, which tallies in its general idea with the Mahājanakajātaka. The Jātaka story is a homogenious and compact account, although some incidents may as well have been added there, while as noted before, the Mbh. version is too abrupt and unconnected.

The name of the king on whom these legends are fathered seems to have been Janaka. The *Mbh.* and Jātaka versions are at one with regard to this fact. In the Jain version, however, these accounts are given not about Janaka but about Nimi. From the agreement in name in the Mbh. and Jātaka versions it may in all probability be said that the Jains substituted the name of Nimi, one of Janaka's ancestors, for Janaka himself. The fact that Janaka was a pious king always engaged in philosophical discussions and that he was a Brahmin in spirit goes back to the times of *Śat. Br.*, while the name and account of Nimi is no where to be found in ancient literature. The idea of substitution need not surprise us as such things have been done by the Brahmins and Buddhists themselves. It is in fact common to all religions.

The two versions of the story of Janaka's renunciation seem originally to have been quite distinct, but later on to have got mixed, as can be seen from the parallelism in stanzas in the three versions. Closely similar words are put in the mouths of Śakra and

the queen and the fact of the burning of Mithilā being figurative already peeps out from the second version (xii-18) in the *Mbh.* where the queen says:

श्रियं हित्वा प्रदीप्तां त्वं श्ववत्संप्राति वीक्ष्यसे ।

In spite of the agreement between the Buddhist and Jain versions, it may have been the fact that the bracelet incident was originally quite independent and was later on amalgamated with the main story. This may be further seen from the fact that the incident is put at different parts of the story in the different versions. In the *Mbh.* it is a separate incident quite unconnected with the story, as is also the case with the reference in Suttanipāta given before. In the Jātaka version it is put at the end of the story, while in the Jain version it does not appear in the regular text of the *Uttarādhyayana* at all, but belongs to the commentarial portion and is given there as having happened before the renunciation of the king.

The heaven and hell incident may be said to have no parallelism at all. In Nimijātaka it is Śakra's charioteer that showed heaven and hell to king Nami while in *Mbh.* xii-99 king Janaka himself showed these to the warriors.

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1 This Stanza occurs also in the *Saṁyutta Nikāya* IV. 2-8.

2 Fausboll VI 33-68.

3 Fausboll VI.

4 I do not mean that there was any conscious and deliberate attempt at substitution. Attention to minor details is many times not paid owing to religions enthusiasm. Besides as Nimi was an ancestor of Janaka, legends about both might early have got mixed together and the Jains may have used just the other version for their purpose.

NĀGĀRJUNA, THE EARLIEST WRITER OF THE RENAISSANCE PERIOD.

BY SATIS CHANDRA VIDYABHUSANA.

The first and foremost writer of the Renaissance period 300 A. D. to 600 was Nāgārjuna, called by Tibetan writers, Klu-grub, round whose name has gathered together a host of traditional stories referring to his gifts as a Physician, a Chemist, an Alchemist and a Philosopher. I shall here only give a short account of Nāgārjuna as a Philosopher. Nāgārjuna was born at Vidarbha (modern Berar) in Mahākośala during the reign of King Sadvaha or Sātavāhana to whom he wrote a letter called Nāgārjunasubord lekha (of the Andhra dynasty)[1] and passed many of his days in meditation in a cave dwelling of Śrī-Parvata[2] that bordered on the river Kṛṣṇā. That Nāgārjuna lived in Vidarbha (modern Berar) is evident from an inscription on an image of Buddha by the side of the Amarāvati Stūpa in character of the early 7th century A. D. The image is said to have been originally prepared by Candraprabha, disciple of Jñānaprabha, who in his turn was a disciple of Bhadanta Nāgārjunācārya.[3] Nāgārjuna was a pupil of Śaraha and is said to have converted a powerful king named Bhoja Deva to Buddhism. He is stated by Lama Tārānāth, to have been a contemporary of king

1. Beal's *Buddhist Records of the Western World*, Vol. II Book VIII, p. 97 and book X p. 210.

2. For an account of Śrī-parvata or Śrī-śaila see Hinenthsang's life, Introduction p. xi by Beal;

3. Archaeological Survey of South India No. 3. Amarāvati Stūpa.

Nemi Candra (about 300 A. D.) and perhaps also of Candra Gupta I (319 A. D.). The latest date that can be assigned to Nāgārjuna is 401 A. D. when his biography was translated into Chinese by Kumārajīva. That Nāgārjuna lived at the end of the 3rd century A. D. harmonises well with the fact that his disciple Deva lived a little after 320 A. D.

Nāgārjuna was the author of a treatise on logic called *Pramāṇa Viheṭana*[4] which is a review of the definitions of the sixteen categories as given in the *Nyāya Sūtra*. The Sanskrit original of this work is not available, but there is extant a Tibetan version of a commentary on it, called *Pramāṇa-viheṭana-ṭippi-ṭaka-vṛtti* or a magic-stick commentary on Pramāṇa-Viheṭana. A special feature of the *Pramāṇa-Viheṭana* is that in it Nāgārjuna for the first time reduced the syllogism of five members into one of three. The five membered syllogism, as explained in the *Nyāya-sūtra*, runs as follows :—

(1) This hill is fiery (Proposition).
(2) Because it is smoky (Reason).
(3) All that is smoky is fiery, as a kitchen (Example).
(4) This hill is smoky (Application).
(5) Therefore this hill is fiery (Conclusion).

As shortened by Nāgārjuna, the syllogism stands thus :—

(1) This hill is fiery (Proposition).
(2) Because it is smoky (Reason),
(3) As a kitchen (Example).

It may be remembered that Indian logicians, in spite of their stout opposition to Nāgārjuna's syllogism,

4. Published by the Buddhist Text Society of Calcutta. Prof, Louis de La Valle Poussin has also edited it.

found it in course of time expedient to adopt the same.

Upāya-Kauśalya-hṛdaya-śāstra is the name of another work on logic in which Nāgārjuna gives a clear exposition of the art of debate. In the *Vigrahabyābartanīkārikā*, a work on general philosophy, Nāgarjuna criticises the Nyāya theory of pramāṇa and it is perhaps this criticism which is reproduced in the *Nyāya-bhāṣya* of Vātsyāyana in connection with his examination of pramāṇa.

But that which distinguishes Nāgārjuna pre-eminently in the world of letters is the Mādhyamika-philosophy founded by him in consonance with the principles of the great Mahājāṇa Vaipulya-sūtra called *Prajñā-Pāramitā.*

The *Mādhyamika-kārikā* is the first work on the Mādhyamika philosophy. The doctrine which permeates this work, is that of the middle path[5] which is to be comprehended from four aspects viz, (1) in contradistinction to one-sidedness, (2) as the abnegation of one-sidedness, (3) as unity in plurality, and (4) in the sense of absolute truth.

As we cannot conceive of being (existence) independently of non-being (non-existence), it will be taking a one-sided view if we are to say that the world exists or that it does not exist. The middle path furnishes a contrast to this one-sidedness by avoiding the extremes of being and non-being. This is the first aspect of the middle path.

Denying the two extremes the middle path reveals itself through a complete harmony between them, that is, it transcends the extremes of being and non-being

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5. L. C. XXIV P. 185.

which are unified. This is the second aspect of the middle path.

The middle path which unifies all particulars, does not lie beyond them. The particulars attain their characters of particularity only through our conception of the unity among them. Had there been no unifying principle, the particulars would have ceased to be as such. This is the third aspect of the middle path.

By "middle path" it is not to be understood that there is something between the two extremes of being and non-being. In fact we must avoid not only the two extremes but also the middle. The middle path, which discards all limitations, expresses the human conception of the absolute truth. This is the fourth aspect of the middle path.

The absolute (Śūnyatā or void) is demonstrated through the assumption of two truths-the conditional (samvṛti) and the transcendental (paramārtha). Judged by the transcendental truth no object comes into being or dissolves into non-being. It is from the point of view of the conditional truth alone that we can speak of the existence or non-existence of an object. As a fact no object has a nature or self-existence: objects come into existence in virtue of certain relations or conditions. Taking a substance and its qualities we find that the latter exist in relation to the former, and the former exists in relation to the latter. So a whole exists in relation to its parts and the latter exists in relation to the former. Proceeding in this way we find that the world is an aggregate of relations or conditions. Origination and cessation, persistence and discontinuance, unity and plurality, coming and going—these are the eight fundamental conceptions of relation or condition.

These conceptions which are absolutely unreal. give rise to our prejudices and wrong judgments. There nestles in them the principle of unrest and misery, and as people cling to them their life is an everlasting prey to the pendulous feeling of exultation and mortification.

Where there is conditionality, there is no truth. Truth and conditionality are incompatible. Therefore to attain the truth, conditionality must be completely cast aside. When our mind is purified from the smirch of conditionality, there will come out the serene moon-light of "suchness" (tathātā) or transcendental truth (paramārtha), otherwise known as the void or absolute (śūnyatā).

It may be asked as to whether there is actually a thing called "suchness", "transcendental truth" or "the absolute". The answer will be that the thing which lies beyond conditionality, cannot be expressed in terms of "is" and "is not" or "being" and "non-being". It avoids the two extremes of "being" and "non-being", nay, it unifies both by underlying each of them. This so-called thing (śūnyatā) is called Nirvāṇa, which is an unconditional condition in which all contradictions are reconciled. Attempts have been made to express this condition by the term " Infinite ", " Eternal ", "Profound" "Unconditioned", "Absolute" or "Blissful", but in reality no language can give adequate expression to it.

The *Mādhyamika-kārikā* by Nāgārjuna, *Mūla-madhyama-vṛtti* by Buddha Pālita, *Hastabala* by Ārya Deva, *Madhyama-hṛdaya-kārikā* by Bhāvāviveka, *Madhyama-pratītya-samutpāda* by Kṛṣṇa, *Mādhyamika-vṛtti* by Candra Kīrti and *Mādhyamikāvatrāṭīkā* by Jayānanta—are the principal works of the Mādhyamika

School. *Mūla-Mādhyamika-vṛtti-akutobhaya*, a work of Nāgārjuna was translated into Tibetan, under orders of the great king Dpal-tha-tsanpo, by the Indian sage Jñānagarbha and the Tibetan official interpreter Kluhi-rgyal-Mtshan. The translation closes by mentioning eight expounders of the Mādhyamika philosophy, viz. Ārya Nāgārjuna, Sthavira Buddha Pālita, Candra Kīrti, Deva Śarmā, Guṇa-Śrī, Guṇa-Mati, Sthira-mati, and Bhavya (or Bhāva-viveka). The doctrine of the Mādhyamika philosophy has been a subject of constant attack by the Indian Philosophers of all Schools. An attempt has even been made to misinterpret it wilfully and even to discard it as a system of nihilism, but it has emerged unscathed. Impartial judges such as the authors of the *Padma Purāṇa* etc have declared the Mādhyamika Philosophy of Nāgārjuna as the basis of the Māyāvāda of Śaṅkarācārya.

I have given only an imperfect idea of Nāgārjuna as a Philosopher. He may be looked at from so many distinct stand-points that he may be rightly called the Aristotle of India.

SŌGATA NĀYASATTHAM.

(THE BUDDHIST PHILOSOPHY.)

BY WIDURUPOLA PIYATISSA.

Idam pana satthamāyasmatā mahākaccāyanattherena mahākhīṇāsavena pabhinnapaṭisambhidena asītiyā mahāsāwakesu antogadhena bhagawatā etadagge ṭhapitena paṇītam navaṅgasatthusāsanasaṃvaṇṇanāya. Tattha navaṅgasatthusāsanam nāma :— suttam, geyyam, veyyākaraṇam, gāthā, udānam, itiwuttakam, jātakam, abbhutadhammam, vedallanti. Bhagavatā desitohi pariyattidhammo imehi navahi aṅgehi vinimmutto nāma natthi. Tadetam navaṅgasatthusāsanasamkhātam pariyattidhammaṃ samvannetukāmenatāwa ñāyasatthaññunā bhavitabbam. Tampanetam sattham racayantena āyasmatā mahākaccāyanattherena dve pakaraṇāni paṇītāni Peṭakōpadesō Nettippakaraṇañcāti. Tesuca Nettippakaraṇambhagavatā anumoditam mūlasaṅgītiyam saṅgītam Badaratitthara vihāravāsinā bhadanta Dhammapālamahātherena dutiyaṭṭhakathācariyena viracitāya aṭṭhakathāya patimaṇḍitam syāmamaramnavisayesu laṅkādīpeca sogatāgamadharehi therānutherehi sambhāviyamānam vattate. Tassevam sambhāvitatte satipi yasmā netametarahi laṅkikāsu ācariyaparamparāsu antevāsike vācenti tasmāssa sabbatthapacalitabhāvo na dissate. Tam sādhu vatassa sace laṅkādīpikā sogatāgamadharā ācariyapuṅgavā pasattham nāyasatthamidamantevāsike vāceyyum etadantogadhattā sakalanavaṅgasatthusāsanasaṃvaṇṇanāya aviññātañāyasatthānañ cādhunikānam pālyatthasaṃvaṇṇanāya ñāyavirodhāpajjanasambhavato. Tasmā mayamevamādikam payojanantaramabhisandhāya Nettippakaraṇam tadaṭṭhakathañca nissāya tatthāgatanayeneva sogatam ñāyasatthamidha saṃkhepato dassayissāma.

Sakalamevahi Nettippakaraṇam āyasmatā mahākaccāyanena dvidhā vibhattam saṅgahavāro vibhāgavāroti. Tatrāyam sangahavārassa saṃkhepo.

Nettisaṃkhātena ñāyasatthena saṃvaṇṇetabbapadatthabhāve ṭhitam suttageyyādinavaṅgasaṅgahitam pariyattisāsanam byañjanatthappabhedato dvādasapadamiha suttam nāma. Tenāha :—

"Dvādasa padāni suttam, tam sabbam byañjanañca atthocāti ".

Tassa ca suttassa atthasaṃvaṇṇanābhūtā solasahārā pañca nayā aṭṭhārasa mūlapadāni ca netti (athavā sogatañāyasattham) nāma. Tattha desanādayo solasapi hārā mūlapada-niddhāraṇamantarena byañjanamukheneva suttassa saṃvaṇṇanāhonti. Pañcasu nayesu tayo atthanayā nandiyāvaṭṭādayo atthamukheneva suttattham samvaṇṇenti. Ubhayampetam suttassa atthaniddhāraṇavasena sabbathā sutte payojitam suttam saṃvaṇṇetināma.

Athava, atthesu kataparicchedo byañjanappabandho desanā, yo pāṭhoti vuccati. Tadattho desitam, tāya desanāya pabodhitattā. Tadubhayampi ekanteneva viññeyyam anupādāparinibbāṇapariyosānānam sampattinam hetubhāvato tadubhayavinimmuttassa ca ñeyyassa abhāvatoti. Yathāvutte ca vijānane sādhetabbe ayam vakkhamāno hāranayānupubbisaṁkhāto anukkamo navangasāsanasaṃkhātassa suttassa attavicāraṇāti veditabboti.

Evamatisaṃkhittam saṅgahavāram vibhajitvā dassetum tadanantaram vibhāgavāro desito. So ca tividho uddesa-niddesa-paṭiniddesavasena.

I (I). Tattha uddesavāre tāva solasa hārā bhavanti :—1. Desanāhāro. 2. Vicayahāro. 3. Yāttiharo. 4. Padaṭṭhānahāro. 5. Lakkhaṇahāro. 6. Catubyūhahāro. 7. Āwaṭṭahāro. 8. Vibhattihāro 9. Parivattanahāro.

10. Vevacanahāro. 11. Paññattihāro. 12. Otaraṇahāro. 13. Sodhanahāro. 14. Adhiṭṭhānahāro. 15. Parikkhārahāro. 16. Samaropanahāroti.

Tattha kenaṭṭhena hārā? harīyanti etehi etthavā suttageyyādivisayā aññāṇasaṁsayavipallāsāti hārā. Haranti vā sayam tāni haraṇamattameva vāti hārā, phalūpacāreṇa. Athavā hariyyanti vohariyyanti dhammasamvaṇṇaka dhammapaṭiggāhakehi dhammassa dānagahaṇavasenāti hārā. Athavā hārā viyāti hārā. Yathāhi anekaratanāwalisamūho hārasaṃkhāto attano avayavabhūtaratanasamphassehi samupajanīyamānahilādasukho hutvā tadupabhogijanasarīrasantāpam nidāghaparilāhūpajanitam vūpasameti. Evametepi nānāvidhaparamattharatanappabandhā saṃvaṇṇanāvisesā attano avayavabhūtaparamattharatanādhigamena samuppādiyamānanibbutisukhā dhammapaṭiggāhakajanahadayaparitāpam kāmarāgādikilesahetukam vupasamentiti. Athavā hārayanti aññāṇādinam hāram apagamam karonti ācikkhatītivā hārā. Athavā sotujanacittassa haraṇato ramaṇatoca hārā, niruttinayena, yathā " bhavesu vantagamaṇo bhagavāti". Ayam tāva hārānam sādhāraṇato attho. Asādharaṇato pana :—

1. Desīyati samvaṇṇīyati etāya suttatthoti desanā desanāsahacaraṇatovā desanā. 2. Vicīyanti etena etthavā padapañhādayo viciti eva vā tesanti vicayo. Pāliyampana viciṇatīti vicayoti ayamattho dassito. 3. Yuttīti upapattisādhanayutti. Idha pana yuttivicāraṇā yutti, uttarapadalopena; rūpabhavo rūpanti ādīsuviya. Yuttisahacaraṇato vā yutti. 4. Padaṭṭhānanti āsannakāraṇam. Idhāpi padaṭṭhānavicāraṇāti ādi vuttanayameva. 5. Lakkhīyanti etena etthavā ekalakkhaṇā dhammā avuttāpi ekavacanenāti lakkhaṇam. 6. Viyūhīyanti vibhāgena piṇḍīyanti etena etthavāti byūho. Nibbacanādīnam sutte dassiyamānānam catunnam byūhoti catubyūho. Catunnam

vā byūho etthāti catubyūho. 7. Āvaṭṭīyanti etena ettha vā sabhāgā visabhāgā ca dhammā, tesaṃ vā āvaṭṭananti āvaṭṭo. 8. Vibhajīyanti etena etthavā sādhāraṇāsādhāraṇānam saṃkilesavodānadhammānam bhūmiyoti vibhatti. Vibhajanam vā etesam bhūmiyāti vibhatti. 9. Paṭipakkhavasena parivattīyanti iminā, etthavā sutte vuttadhammā, parivattanam vā tesanti parivattano. 10. Vividham vacanam ekassevatthassa vācakametthāti vivacanam. Vivacanameva vevacanam. Vividham vuccati etena atthoti vā vivacanam. Sesam vuttanayameva. 11. Pakārehi pabhedato vā ñāpīyanti iminā ettha vā atthāti paññatti. 12. Otarīyanti anuppavesīyati etena ettha vā suttagatā dhammā paṭiccasamuppādādīsūti otaraṇo. 13. Sodhīyanti samādhīyanti etena ettha vā sutte padapadatthapañhārambhāti sodhano. 14. Adhiṭṭhīyanti anupavattīyanti etena ettha vā sāmaññavisesabhūtā dhammā vinā vikappenāti adhiṭṭhāno. 15. Parikaroti abhisaṃkharoti phalanti parikkhāro. Hetu, paccayoca. Parikkhāram ācikkhatīti parikkhāro hāro. Parikkhāravisayattā parikkhārasahacaraṇatovā parikkhāro. 16. Samāropīyanti etena ettha vā padaṭṭhānādimukhena dhammāti samāropano. Sabbattha ca bhāvasādhanavasenāpi attho labbhatīti tassāpi vasena yojetabbam.

(II.) Pañca ṅayā bhavanti, yathā :—1. Nandiyāvaṭṭo. 2. Tipukkhalo. 3. Sīhavikkīḷito. 4. Disālocano. 5. Aṅkusoti.

Tattha nayanti samkilese vodānānica vibhāgato ñāpentīti nayā. Nīyanti vā tāni etehi ettha vāti nayā. Nayanamattameva vāti nayā. Nīyanti vā sayaṁ dhammakathikehi upanīyanti suttassa atthapavicayatthati nayā Athavā nayā viyāti nayā. Yathāhi ekattādayo nayā

sammā paṭivijjhiyamānā paccayapaccayuppannadhammānam yathākkamam sambandhavibhāgabyāpāravirahānurūpaphalabhāvadassanena asaṅkarato sammatisaccaparamatthasaccānam sabhāvam pavedayantā paramatthasaccapaṭivedhāya samvattanti, evametepi kaṇhasukkasappatibhāgadhammavibhāgadassanena aviparītasuttatthāvabodhāya abhisambhuṇantā veneyyānam saccapaṭivedhāya samvattanti. Athavā pariyattiatthassa nayanato samkilesato yamanato ca nayā, niruttinayena.

1. Nandiyāvaṭṭoti ādīsu nandiyāvaṭṭassa viya āvaṭṭo etassāti nandiyāvaṭṭo. Yathā hi nandiyāvaṭṭo anto ṭhitena padhānāvayavena bahiddhā āvaṭṭati, evamayampi nayoti attho. Atha vā nandiyā taṇhāya pamodassa vā āvaṭṭoti nandiyāvaṭṭo. 2. Tihi avayavehi lobhādīhi saṃkilesapakkhe alobhādīhi vodānapakkhe pukkhalo sobhanoti tipukkhalo. 3. Asantasanajavaparakkamādivisesayogena sīho bhagavā. Tassa vikkīḷitam desanāvacīkammabhūto vihāroti katvā vipattāsatappaṭi pakkhaparidīpanato sīhassa vikkīlitam etthāti sīhavikkīḷito nayo. Balavisesayogadīpanato vā sīhavikkīḷitasadisattā nayo sīhavikkīḷito. Balaviseso cettha saddhādi balam, dasabalāni eva vā. 4. Atthanayattayadisābhāvena kusalādidhammānam ālocanam disālocanam. 5. Tathā ālocitānam tesam dhammānam atthanayatta yayojane samānayanato aṅkuso viya aṅkusoti.

(III.) Aṭṭhārasa mūlapadāni bhavanti yesam nava kusalāni nava akusalāni. Tattha, (1). Taṇhā. (2) Avijjā. (3). Labho. (4). Doso. (5). Moho. (6). Subhasaññā. (7.) Sukkhasaññā. (8). Niccasaññā. (9) Attasaññāti, navapadāni akusalāni. Sabbopi akusalapakkho ettheva saṅgaham samosaraṇam gacchati.

Tatha, (1.) Samatho. (2.) Vipassanā. (3.) Alobho. (4.) Adoso. (5.) Amoho. (6.) Asubhasaññā.

(7.) Dukkhasaññā. (8.) Aniccasaññā. (9.) Anattasaññāti, imāni navapadāni kusalāni. Sabbo kusalapakkho ettheva saṅgaham samosaranam gacchatīti.

Tattha mūlapadānīti, mūlāni ca tāni nayānam paṭṭhānabhāgānañca patiṭṭhābhāvato padāni ca adhigamūpāyabhāvato koṭṭhāsabhāvato cāti mūlapadāni. Kosallasambhūtaṭṭhena kucchitānam vā pāpadhammānam salanato viddhaṃsanato, kusānam vā rāgadīnam lavanato, kusam viyavā lavanato, kusena vā ñāṇena lātabbato pavattetabbato kusalāni. Tappaṭipakkhato akusalāniti. Ayam uddesavārassa saṃkhepo.

(II) Idāni niddesavāram samkhepato dassema. So pañcadhā daṭṭhabbo. (1.) Padatthato. (2.) Lakkhaṇato (3) Kamato. (4). Etaparamato. (5.) Hetvāditoti.

1. Tattha sāmaññenā hāranayasaddānam visesena desanāsaddādīnañca padattho aṭṭhakathagatanayena uddesavāre dassitto yeva.

2. Lakkhaṇe pana sāmaññato tāva sabbepi hārā nayā ca yathākkamam byañjanatthamukhena navaṅgassa sāsanassa atthasaṃvaṇṇanalakkhaṇā. Visesato desanādīnam lakkhaṇam evam daṭṭhabbam :—

(1) Assāda-ādīnava-nissaraṇa-phala - upāya - āṇattīnam vibhajanalakkhaṇo desanāhāro. (2) Padapucchāvissajjanapubbāparānugītinam assādādinañca visesaniddhāraṇavaseneva vicayalakkhaṇo vicayahāro. (3) Sutte byañjanatthānam yuttāyuttabhāvavibhāvanalakkhaṇo yuttihāro. (4) Sutte āgatadhammānam padaṭṭhānabhūtā dhammā tesañca padaṭṭhānabhūtāti sambhavato padaṭṭhānabhūtadhanmaniddhāraṇalakkhaṇo padaṭṭhānahāro. (5) Sutte anāgatepi dhamme vuttappakārena āgate viya niddhāretva samvaṇṇanalakkhaṇo lakkhaṇahāro. (6) Nibbacana adhippāya desanānidāna pubbāparānusandhīnam catunnam vibhāvanalakkhaṇo

catubyūhahāro. (7) Desanāyagahitasabhāgavisabhādhammavasena āvaṭṭanalakkhaṇo āvaṭṭahāro. (8) Saṁkilesadhamme vodānadhamme ca sādhāraṇāsādhāraṇato padaṭṭhānato bhūmito ca vibhajanalakkhaṇo vibhattihāro. (9) Niddiṭṭhānam dhammānam paṭipakkato parivattanalakkhaṇo parivattanahāro. (10). Ekasmim atthe anekapariyāyasaddayojanalakkhaṇo vevacanahāro. (11) Ekekassa dhammassa anekāhi paññattīhi paññāpetabbākāra vibhāvanalakkhaṇo paññattihāro. (12) Paṭiccasamuppāda-indriya-khandha-dhātu-āyatanamukhehi suttatthassa otaraṇalakkhaṇo otaraṇahāro. (13) Sutte pada-padattha pañhārambhānam sodhanalakkhaṇo sodhanahāro. (14) Suttāgatānam dhammānam avikappanavasena sāmaññavisesaniddhāraṇalakkhaṇo adhiṭṭhānahāro. (15) Sutte āgata dhammānam parikkhārasamkhāte hetupaccay eniddhāretvā samvaṇṇanalakkhaṇo parikkhārahāro. (16) Sutte āgatadhammānam padaṭṭhāna-vevacana-bhāvanā-pahāna samāropana vicāraṇalakkhaṇo samāropanahāro.

Nayesu ca, (1) Taṇhā avijjāhi samkilesapakkhassa suttatthassa samathavipassanāhi ;vodānapakkhassa ca catusaccayojanāmukhena nayanalakkhaṇo nandiyāvaṭṭo. (2) Akusalamūlehi samkilesapakkhassa kusalamūleh vodānapakkhassa ca suttatthassa catusaccayojanāmui khena nayanalakkhaṇo Tipukkhalo. (3) Subhasaññadīhvipallāsehi sakalassa samkilesapakkhassa saddhindriyādīhi vodānapakkhassa ca catusaccayojanāvasena nayanalakkhaṇo sīhavikkīlito. (4) Tesu tesu suttatthavissajjanesu tassa tassa nayassa disā bhūtānam vodāniyānam samkilesikānam ca dhammānam manasā olokanalakkhaṇo disālocano. (5) Disālocanena olokitānam dhammānam uddharitvā tassa tassa nayassa yojanāwasena samānayanalakkhaṇo aṅkusoti. Ime pana dvepi na atthanayā. Athakho vohāranayā kammanayāti ca vuccanti.

Tattha byañjanapariyeṭṭhibhāvato hārānam paṭhamam soḷasa hāre yojetvā tadanantaram tiṇṇam atthanayānam disābhūta-dhamme disālocana-nayena oloketvā puna te niddhāretvā aṅkusanayena tīsupi atthanayesu nandiyāvaṭṭatipukkhala-sīhavikkīlitesu yojentena suttatthavaṇṇanā kātabbā.

Idha ṭhatvā cha byañjanapadāni cha atthapadānīti suttassa dvādasa padāni dassetabbāni.

Tattha cha byañjanapadāni nāma, (1) Akkharam. (2) Padam. (3) Byañjanam. (4) Nirutti. (5) Niddeso. (6) Ākāroti.

1. Tattha apariyasite pade vaṇṇo akkharam, pariyāyavasena akkharaṇato asañcaraṇato ca. 2. Pajjati attho etenāti padam. Nāma-ākhyāta-upasagga-nipātavasena catubbidham. 3. Samkhepato vuttam padābhihitam attham byañjayatīti byañjanam Vākyam. Padasamudāyoti attho. 4. Ākārābhihitam nibbacanam nirutti. 5. Niravasesadesanattā nibbacanavitthāro niddeso. 6. Padehi vākyassa vibhāgo ākāro.

Atha padato ākārassa ko visesoti? Apariyasite vākye avibhajjamāne vā tadavayavo padam. Uccāraṇavasena pariyasite vākye vibhajjamāne vā tadavayavo ākāroti.

"PHILOLOGY AND PRĀKṚTS"

THE PHONOGENESIS OF THE WIDE E AND O IN GUJARĀTĪ.

By N. B. Divatia.

This wide sound is distinctly perceived in Gujarātī in words of the type of वॅर, छॅल, and कॅाठी, गॅाळ, especially when they are contrasted with the narrow sound in words of the type of वेल, वेरवुं; कोठी, गोळ. (कॅाठी means the wood-apple tree, कोठी means a large earthen jar; गॅाळ molasses, गोळ round). The wide sound resembles that of *a* in "*hat*" and that of *aw* in "*awl*" in English. The narrow sound resembles the sounds in English "*hale*" and "*hole*."

The wide sound is peculiar to Gujarātī and Māravāḍī; it is not heard in other cognate languages[1] of India. Hindī possesses a sound which it represents by ै and ौ (अे-औ); it does not exactly tally with the wide sound, it approximates it up to a certain point only. It may be stated roughly that the wide sound comes into Gujarātī words which had an अइ or अय, or अउ or अव in the earlier stage (Prākṛt, Apabhraṁśa,; or—where possible—Sanskrit), whereas words having an अे or ओ originally in Sanskrit or Prākṛt stages yield the narrow sound in Gujarātī. Thus :— वइरु (Ap.), वयणु

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1. Marāṭhī, which sedulously avoids the wide sound as a rule, discloses occasional exceptions, as in the final अ of neuter plural forms of nouns ending in अ, e. g. फळ, फळें (plur.), and in the final अें of the nominative singular of words in the neuter gender ending in the अें stem e. g. सोनें, वांकडें; the अे in both these cases is अर्धविवृत.

In the latter case this sound is derived from the अकं (Skr.) yielding अयं in Prākṛt, and in the former it comes from the आनि (Skr.) becoming आइं in Prākṛt, which contracts into अइं, then finally becomes अयं; (फलानि, फलाइं, फलइं, फलयं, फळें).

(Ap.), चउक्कु (Ap.), गवक्खु (Ap.), then गवखु, yield the wide-sounding, वेर, वेण, चोक, गोख, whereas केळी (Pr.), बोर (Pr.), give the narrow-sounding केळ, बोर &c.

In Gujarātī this wide sound does not appear to have been systematically recognized by any special symbol, either in olden times or during the period of revival of education. Occasional and stray attempts were made to indicate the sound by marks like or sometimes by inverted *mātrā* marks, thus ‵. In 1888 A. D., however, I pressed the claim of this sound in a pamphlet in Gujarātī on the unsettled state of spelling in Gujarātī. I renewed the fight in 1905 A. D. in a paper on Gujarātī spelling read before the First *Gujarātī Sāhitya Pariṣad.*

In an article in the Indian Antiquary[2] I discussed this question and suggested for the first time that both the sets of changes, अइ–अउ to अॆ–ऑ and अय–अव to अॆ–ऑ could be reduced to a common principle by showing that अइ–अउ went through a process which I termed *prati-saṁprasāraṇa*, and thus became अय–अव, and eventually both these अय–अव forms (original and derived fromअइ–अउ,) becameअय्–अव्, and this peculiar sound (अय्–अव्) generated the wide अॆ and ऑ.

In an Appendix to his article on "Bardic and Historical Survey of Rājputānā"[3] Dr. L. P. Tessitori examined my views above indicated, and showed why he differed from me and held that the wide sound resulted from a *direct* contraction of अइ–अउ. I felt that this contention had obvious drawbacks, and in a second article in the Indian Antiquary[4], I went into the whole

2. Ind. Ant. XLIV, Parts, DLII, and DLVI, January and May, 1915 A. D.

3. J. A. S. Beng., N. S. XII, 1916 A. D.

4. Ind. Ant. Vol XLVI, Part DLXXXIX 1917 A. D. and Vol. XLVII, Parts DXCI and DXCII, 1918 A. D.

question at great length, drawing upon portions of my Wilson Philological Lectures (still in the press), and hoped that the question was set at rest. Dr. Tessitori, however, was not satisfied, and published his remarks on this article of mine in the Indian Antiquary last year[5].

In order to clear up the position, I think it necessary to place my views on these remarks finally as briefly as possible. Dr. Tessitori's contentions, as seen in this last article, seem to be these:—

(*a*) That words like वयर, वयरागी, पयसार are not really instances of what I call *prati-samprasāraṇa*, but the result of the tendency of scribes to write य for इ, and that this writing peculiarity is found even in Prākṛt MSS, and he cites instances from Jacobi's *Mahārāṣṭrī Erzählungen* pp. 73 (? 72), 63 61, and 60.

(*b*) That अइ–अउ were altered by scribes into अै–अौ as soon as the spelling ceased to correspond to the actual pronunciation, and that Gujarātī MSS. show this अै–अौ to represent the wide sound.

(*c*) That the principle of accent which I hold to govern the production or otherwise of अय–अव and then अे–अो or the opposite, is not properly applicable.

(*d*) That perception by the ear in the case of the origin of this sound is a misleading test, the true guides are MSS. and etymology.

(*e*) That, in the instances given by me such as कषपट्टिका–कसवट्टिआ–कसउटी–कसोटी, घनतरकं–घणयरउं–घणइरउं–घणेरुं, the change that takes place is अय to अे (narrow) or अव to ओ (narrow) *direct* and not through अइ–अउ, because the य–व there, being initial, cannot undergo *samprasāraṇa.*

5. Ind. Ant. Vol. XLVII, Part DXCIX, September 1918 A. D.

(*f*) That, in short, the wide sound results from अइ-अउ *direct* and the narrow one from अय-अव *direct.* Thus, the main point at issue is: Of the two phonetic courses :

(a) वचन–वयण–वय्ण–वॅण,
मलिनकं–मइलउं–मयलउं–मय्लउ–मॅलुं,
गवाक्ष–गवक्ख गवख–गव्ख–गॉख,
मुकुट–मउड–मवड– मव्ड–मॉड;

and

(b) वचन–वयण–वइण–वॅण,
मलिनकं–मइलउं–मॅलुं,
गवाक्ष–गवक्ख–गवख–गउख–गॉख,
मुकुट–मउड–मॉड;

which is the correct one?

In other words, of these:—(a) and (b) viz.

(a) अय–अय्–अॅ, अइ–अय–अय्–अॅ,
अव–अव्–ऑ, अउ–अव–अव्–ऑ;

and (b) अय– अइ–अॅ,
अइ–अॅ,
अव– अउ–ऑ,
अउ–ऑ,

which is the correct tracing of the sound-history?

All other issues are but ramifications of this main one.

In support of my theory I cited वयर, वयरागी, पयसार, बयठु, पयठु etc.–as showing that the step from अइ to अय was seen in actual use as these forms are found in old MSS. and works. To get over this difficulty Dr. Tessitori wants us to hold that these forms with a य in them do not represent a *real* change from इ to य, but that the य therein is a mere writing peculiarity of the scribe. We have thus to believe that what we see as य is not य but इ—a sort of *vivartavāda* introduced in phonology ! Dr. Tessitori wishes to strengthen his contention and show us such

illusive writing even in Prākṛt and cites instances from Jacobi's *Mahārāṣṭrī Erzählungen.* (Pp. 73 (? 72), 63,61 and 60); these are:—

(*a*) गयं for गइं (p. 72) (*b*) पयसारियो for पइसारियो (p. 63) (*c*) कयवय for कइवय (p. 61) (*d*) वयर for वइर (p. 60).

Now, गयं can be taken as the Prākrit of गतं and we need not regard it as गइं *written* as गयं, for गतं can also mean "gait" (गति). But पयसारिओ, कयवय and वयर cannot be explained in any such way. Let us then take गयं also as representing गइं and look for the cause of the य in all the four cases. This much is certain: that Prākṛt never changes an इ to य. वयर and similar forms came into vogue (whether as phonetic realities or as the scribe's vagary) during the O. W. Rājasthānī period, which Dr. Tessitori places from the thirteenth century A. D. down to the sixteenth and part of the 17th century A. D. The chances, then, are equal or perhaps greater that these readings with a य in them must have been the result of handling by scribes belonging to this O. W. Rājasthānī period, when such forms existed as results of real substantial phonetic changes[6]. And Jacobi tells us in his preface that Ms. A was written in V. S. 1611 and Ms. B. in V. S. 1660, which dates just fall within that period. He also tells us therein that in certain points of orthography stated by him (which points, it is true, do not include the writing of य and इ) the Mss. are quite arbitrary and inconsistent. This character of the Mss. may have affected the writing of इ as well, especially as Jacobi in his "Foreward" tells us also that the Mss. A and B are corrupt and unreliable and he had to construct the text

6. गयं, however, presents a difficulty. For such a change is not known. It must be regarded as a mislection, if गतं is not accepted as the original.

by using one Ms. against the other, and by using reflection and thought when both the Mss. were wrong. In these circumstances it would be unsafe to regard the writing of य for इ as dating from the Prākṛt period, and as a mere writing peculiarity. For the *writing* cannot be referred to a time anterior to V. S. 1660 and 1611 in the case of these Mss.

I may point out that, far from regarding forms like वयर etc. as the result of the scribe's writing peculiarity, Dr. Tessitori has treated the change of इ to य as a substantial phonetic change in his[7] "Notes" § 4- (5), claiming such a change for the medial इ and citing the very words पयसार (Pañcākhyāna, 246), वयर (Ibid 503), and वयरागि (Florentine Mss. 616,126). He has there treated of the change of इ to य in *rare cases* as a writing peculiarity and cited instances like क्यम, त्यम, सुण्य which, I contend, are real changes, as we find them in the present day Gujarātī, spoken and written. But for वयर, वयरागि, पयसार he has not at that time claimed the theory of mere "writing peculiarity." It was when later on he replied to my first article in his paper on "Bardic Survey" that (P. 76) he extended this theory of "writing peculiarity" to वयर. And yet in the same place, at the next breath, he says that वयर, वयरागि are Prākṛt *tatsamas* and that the अय may be a corruption of Skr. ऐ instead of a modification of O. W. Rājasthānī अइ. In my reply article I showed that this could not be, the change of ऐ to अय being unknown to Prākṛt.[8] Now, in his final rejoinder, Dr. Tessitori adheres to the "writing peculiarity" theory, and yet in foot-note 6 he again says that वयरागि is a *tatsama* "in part modelled on वयर". Now, what are we to

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7. "*Notes on the Grammar of the O. W. Rājasthānī*," reprinted from the *Indian Antiquary*.

8. Indian Antiquary, December 1917, P. 299.

accept?—Real phonetic change, as stated in "Notes" 4-(5)? Or *tatsama* theory, as given in "Bardic Survey" (P. 76)? Or "writing peculiarity" theory? I see absolutely no reason to give up the first theory of real phonetic change. I have already given my reasons in previous articles. I had put forward the theory that "changes in a language cannot proceed on regular lines of uniform march, some forms will linger, some progress, some go backwards and forwards till a final settled state is reached." Dr. Tessitori is sceptical about, and laughs at, this theory and considers that it requires to be proved. For proof, I would simply point to the cases of reversion of ल to ळ and back to ल and again to ळ; न to ण and back to न which I have already cited in my article; also to the fact that forms like करइ, करि and करे are seen in backward and forward movement in Mss. of different periods, till करे was the finally fixed form; so also अछइ, छइ, अछे, छे are found with and without अ in a similar state of flux and reflux. Lastly, Dr. Tessitori himself elsewhere says:—

"The passing of one language into another being always effected through gradual steps, it is natural that whenever the older language is made to finish and the younger one to commence, some of the features of the former must be found in the early stage of the latter and likewise some of the features of the latter in the ultimate stage of the former."

See also Beames (*Comparative Grammar*, Vol. I P. 238, §60).

Surely my theory differs very little, in principle and in effect, from the one adumbrated in the above quoted passage. Dr. Tessitori's final argument is that अइ-अउ of O. W. Rāj. were changed into अै–औ in Māravāḍī and Gujarātī

writing about the sixteenth century[9] A. D., when the Māravāḍī and the Gujarātī found that the spelling अइ–अउ no longer corresponded to the actual pronunciation. I contested the statement that old Gujarātī writing possessed ऐ–औ in such cases (i. e. for अइ–अउ in their progress towards the wide sound). Dr. Tessitori contends that even if these ऐ–औ were found in Māravāḍī Mss. alone, it would suffice. I fail to see how. For, as I have pointed out, the ऐ–औ in Māravādī Mss. are but a feeble attempt to symbolize the wide sound. I maintain that अइ–अउ passing through the अय–अव and अय्–अव् stages attained the wide sound and for want of any better symbols the Māravādī Mss. represented it by the diphthongal signs ै ौ. But Dr. Tessitori goes a step further and maintains that old Gujarātī Mss. too possess these symbols ै ौ for such cases, and he quotes an extract from a Gujarātī Bālāvabodha to a "Jambucaritra" (a Jain work) which has बैठो...सांभलै छइ तिवारइ...भगवंत नइं वांदइं... करइं...देवलोकइं...छइ. Dr. Tessitori finds in the simultaneous position of ै and अइ here a proof that अइ–अउ led direct to ऐ–औ without any intermediate step like अय–अव. It is necessary to know where this Ms. was written and whether by a Gujarātī or by a Māravādī scribe? Without having a careful look into the Ms. which is quoted from, it would be difficult to make any pronouncement. But in view of Dr. Tessitori's assertion that the above is only one of many Mss. in which ऐ is used side by side with अइ I may just hint that this admixture of ऐ and अइ may be the result of Māravāḍī scribes copying Gujarātī Mss. I have recently made a careful scrutiny of

9. This is inconsistent with the period assigned by Dr. Tessitori to O. W. Rājasthānī. For, he holds rightly that O. W. Rājasthanī extended at least up to the end of the 16th Century A. D.

many old Gujarātī Mss. of the period under consideration, with the result that nowhere do the Gujarātī Mss. use ै ौ for the evolutes of अइ-अउ and that where, in very *rare* instances these diphthongal symbols are found, they owe their presence to the fact that the scribe was a Māravāḍī or one under Māravāḍī influence.

But a greater confusion attends Dr. Tessitori's view about the actual pronunciation of ऐ-औ turned out from अइ-अउ (according to him). What was the actual pronunciation ? We should have expected the answer to be—the wide ॲ-ऑ. But Dr. Tessitori gives us varying answers. Thus:—

(1) The ऐ-औ were pronounced as diphthongs. (Ind. Ant. September 1918, P. 227).

(2) *Tadbhava* ऐ-औ were not pronounced exactly the same way as *tatsama* ऐ-औ but they were probably pronounced in a way similar to the ऐ-औ of Hindī. (Ibid, P. 228 and n. 10).

(3) The Hindī ऐ-औ sounds are identical with the wide ॲ-ऑ of Māravāḍī and Gujarātī, except that they represent a slightly earlier stage, the very same stage of the Māravāḍī Gujarātī diphthongs as they must have been pronounced previous to their transition into the wide vowels, ॲ-ऑ. (Ibid Pp. 231-232).

Now, a number of questions rise up on a perusal of these more or less conflicting statements:

First and foremost:—If ऐ-औ were pronounced as diphthongs, how did they all of a sudden jump into the the wide sound? This my doubt (Ind. Ant. Jan. 1918) received no answer.

Secondly, What *are tadbhava* ऐ-औ ? As a matter of fact, there are no ऐ-औ in Prākṛt or Gujarātī, except in rare instances like सौ, छैयो, मैयो, wherein the sound is exactly like the *tatsama* ऐ-औ, Probably Dr. Tessitori

means by " *tadbhava* ऐ-औ " the really widish sound of Hindī, in fact he suggests this cautiously in note 10 at P. 228, for he uses the word "probably." This caution, combined with the fact that Dr. Tessitori at first says (P. 227) that the ऐ-औ were pronounced as diphthongs,--as also the expression "presumably like the *tatsama* ऐ-औ" (Bardic Survey, P. 76, last para, ll. 5-6), drives me to the suspicion that Dr. Tessitori is undecided as to the exact nature of the ऐ-औ used in Māravāḍī (and, according to him, in Gujarātī); that he feels the gradations of the sound from ऐ-औ to अॅ-ऑ, but represents them haltingly.

Thirdly:--taking Dr. Tessitori's statements all together, especially No. (3) noted above, the following appears to be his serial view:--

(*a*) Pure diphthongal sound--found only in Sanskrit and in *tatsama* words in the vernaculars;

(*b*) ऐ-औ sounded not like pure diphthongs, but fighting shy of the wide sound (अॅ-ऑ) as is the case with Hindī, and which, Dr. Tessitori thinks, existed in Māravāḍī (and, according to him, in Gujarātī) before the true wide sound (अॅ-ऑ) was arrived at;

(*c*) ऐ-औ as representing the present day true wide sound in Māravāḍī.

Taking this as the fairest construction of Dr. Tessitori's view, I maintain what I stated before, that the ऐ-ऐा of Hindī stand by themselves, and that the early Māravāḍī ऐ-औ did not represent this semi-wide Hindī sound, but were but wrong symbols for the true wide sounds अॅ-ऑ. For there are hardly any grounds on which the theory suggested in (b) above for the old Māravāḍī sound can be based. Anyhow, when the symbols ऐ-औ cover so very divergent sounds as noted above, how can we accept Dr. Tessitori's recommendation for the adoption of those symbols for the representation of the true wide sound ?

It must be borne in mind that अॅं–औं, as diphthongs, possess the component sounds अ and इ, and अ and उ, not so closely fused together as अ–ओ do, and that the wide ॲ–ऑ are of the latter kind (संकीर्ण संधिस्वर) rather than of the former kind (संसृष्ट संधिस्वर). Thus ॲ–ऑ would be a better sign.

In the course of my arguments I have appealed to ear-perception in tracing the genesis of the wide sound as contrasted with the narrow sound; thus, I have shown that अय्–अव् (after the loss of the द्रुततर final अ in अय–अव) if sounded as in वय्र (from वयर)–गव्ख (from गवख), present to the ear the sound nearest to the wide sound ॲ–ऑ, whereas अइ–अउ, sounded as in अवइव (from अवयव), नउल (from नकुल), present the conditions of the narrow sound. Dr. Tessitori regards this ear-test as misleading. According to him the real facts are that अइ–अउ do not give ऐ–ओ (narrow), but ॲ–ऑ (wide), and अय–अवं do not give ॲ–ऑ (wide), but ऐ–ओ (narrow). According to him घनतरकं gives घणेरुं (G.) through the अय in घणयरउं, and कषपाट्टिका gives कसोटी (G.) through the अब in कसवटी. I go a step further and hold that the narrow sound results after the अय–अब pass through the अइ–अउ stage; nothing else is phonally possible.

Dr. Tessitori's view that अय–अव generate the narrow sound *direct*, and अइ–अउ generate the wide sound direct, will land him into a dilemma in certain cases: Take, for example, नकुल–नउल–नोळ (G.), बकुलसरी–बउळसरी–बउरसली by metathesis)—बोरसली (G-). Here, if he interpolates an अव between the अउ and ओ stages, he will have to accept *prati-samprasāraṇa*, which he has all along been opposing; if he does not interpolate an अव he must accept the *direct* change of अउ to ओ (narrow). He cannot get over this situation by bringing in the वश्रुति theory to his rescue. For, according to him, वश्रुति comes

in if the उ is preceded by a long vowel whereas here the preceding vowel is short.

In matters of this kind oral tradition and demonstration are essential; hence the value of गुरुसंप्रदाय. Mere dead formulæ and symbols are useless without such teaching. Live sound must be presented to the ear. Even Dr. Tessitori himself, when he had to rely on dead spelling and symbols before he arrived in India, was under the impression that Gujarātī turned the अइ-अउ of O. W. Rāj. to अे-ऑ and Māravāḍī to अै-औ. He perceived the wide sound only after hearing it in India. And I am sure that he will perceive the true sound-values of individual words in Gujarātī after he visits Gujarāt and hears the various sounds carefully.

Dr. Tessitori's view is based on what is visible to the eye on the surface; thus, he finds घनतरकं-घणयरउं-घणेरुं; कषपट्टिका-कसवटी-कसोटी and seeing अय-अब as precursors of the narrow अे-ओ he at once regards them as the *immediate* precursors. I feel a phonal difficulty in obtaining a narrow sound from अय-अव, and therefore interpolate (with good reasons and evidence) a *samprasāraṇa* stage अइ-अउ, which alone can yield the narrow sound. To this Dr. Tessitori's objection is that *samprasāraṇa* is not possible if the व (or य) is initial, and in these words the व and य are initial with reference to the उत्तरपद or the suffix (as the case may be); for instance, says he, वइर and अ-वस retain the व intact because they are initial, but नवमउ becomes नउमउ. He further seems to trace the cause in the presence or absence of stress on the व (and य); thus, according to him कसवटी becomes कसोटी (narrow) from अव direct, when the व is stressed, and it becomes कसउटी and then कसॉटी (wide) when the व is unstressed—(कसॉटी—wide—may be Māravāḍī, but it is not Gujarātī which has only the narow ओ in कसोटी).

Thus he believes in the shifting of accent just as I do, but we arrive at different results: with him the stress on व or य prevents *samprasāraṇa* and its loss causes *samprasāraṇa*, while my theory, on the other hand, is that absence of accent on व or य (in अव-अय)--strictly speaking, on the अ thereof-leaves the preceding अ accented, and the अ of व and य becoming इत्तर, is dropped, thus creating अय्-अव् as the cause of the wide sound; whereas an accent on such व or य (i. e. on their अ) causes *samprasāraṇa* of the व or य.

The reason is this: the principle governing *samprasāraṇa* is quite different from what Dr. Tessitori supposes. *Samprasāraṇa* is not prevented by the position of व or य as an initial letter of a word, nor is it caused by its not occupying such position. The principle governing *samprasāraṇa* in words coming into the vernaculars seems to be this: *samprasāraṇa*. arises from the softening of the effort in pronouncing the semi-vowels, व and य ; it is a liquefication of these sounds. This softening of the effort occurs, is rendered possible, when the य or व occupies an accented position. It will be perceived that the य and व first get softened into the लघुप्रयत्नतर stage, and then that leads to the complete liquefication into the vowel stage. This will be clear when we remember that the गुरुप्रयत्न य-व possess a larger consonantal element than vocal, while the लघुप्रयत्नतर contain a larger vocal element than consonantal. This view will enable as to truly appreciate the very happy names coined by Dr. Hoernle for the two aspects: "semi-consonants" to express the strong य-व and "semi-vowels" to denote the weak य-व (*Vide* his Introduction to the *Prākrita-Lakṣaṇa*, Page XXVII, § 4).

However, when the व or य is purely initial i.e. at the beginning of a word which is not an उत्तरपद in a compound or a suffix, this power of the accent is counteracted by the necessity of pronouncing the य् or व् strongly, as they have no preceding support, and so वयर, यवन retain their initial व् and य् respectively unsoftened, although they are accented. This leads up to the condition essential for *samprasaraṇa;* viz: *intervocalic position of* य् *and* व्. For, when य् or व् comes between two vowels, a vocalic atmosphere is created by the vocalizing influence of the two adjacent vowels, and we get the *samprasāraṇa.* This is possible only when the अ of य–व is accented, for, otherwise, the first अ (of अय–अव) gets the accent, and this final अ of अय–अव becomes गौण and इतत्तर and gets dropped; and so अय्–अव् come in and give the wide sound. (Thus, the very stress which, as belonging to the initial य or व of an उत्तरपद or suffix, Dr. Tessitori regards as *preventive* of *samprasāraṇa,* is with me the very condition furnishing a causative principle—viz: a vocalic surrounding—for *samprasāraṇa,* (of course, provided that a vowel also precedes the य–व). Thus, the two conditions for *samprasārāṇa* are:—

(a) Intervocalic position of य् or व् and (b) Stress on the second vowel, i. e. the vowel of य–व.

Dr. Tessitori (P. 229) seems puzzled at this accent theory of mine. He rightly guesses that the accent I speak of is not the old Sanskrit accent. It cannot possibly be where Prākrit and post-Prākrit word-forms are concerned.

This being the case, Dr. Tessitori's contention that my accent does not fall on the same syllable on which the Sanskrit accent would fall, and so forth, and his instances at footnote 12, P. 229, must be brushed aside as more or less irrelevant.

But Dr. Tessitori objects to my way of locating the accent relatively as between the अ and इ (or उ), or between अ and य (or व). He thinks that instances like चित्तऊड and पण्णउह्नी are irrelevant because these are cases of a long ऊ (अऊ) not of अउ (short उ). I am afraid Dr. Tessitori has overlooked the object I have in view in giving such instances. It is to derive from cases of undoubted accent (the long vowel being necessarily accented) the underlying principle which prevents *prati-samprasāraṇa.*

Finally, Dr. Tessitori, in dealing with my tenative theory about foreign influence in the matter of the wide sound, resorts to a very questionable argument. I have simply stated that in view of the appearance of the wide sound during a period coinciding with the intellectual advancement during Akbar's time when Persian and Arabic flourished in India, this wide sound in words of the type of वय्ण (वॆण)–कव्डी (कॊडी) found a sort of kinship in the Arabic-Persian words of the type of हय्रान (हॆरान), कव्ल (कॊल), and "*was matured under the indirect influence of these foreign languages.*" Dr. Tessitori says that such a theory is "as ridiculous as it would be to impeach English because it possesses words like "hat" and "hot" whereof the vowels are pronounced much like the ॲ-ऑ of modern Gujarātī."

This would be really reversing the sequence and relation between cause and effect, for the wide sound began four centuries ago, while the English contact with Gujarātī is only a century old, whereas the Arabic-Persian sound and the Māravāḍī Gujarātī sound flourished side by side in India, both undergoing the operation of similar formative forces. This need not be pooh-poohed as absurd, for the अय्-अव् phonally generate the ॲ-ऑ in either case. It must be noted particularly

that the Arabic-Persian sound is not the wide ऍ-ऑ but अय्-अव्; only in coming into Gujarātī from Arabic-Persian it is that such words transform the अय्-अव् into ऍ-ऑ.

If phonal influence from English were to be traced, one could very well note the foreign sound of फ (f) that is imperceptibly creeping into Indian phonology, which centuries later may be justly traced to English (and partly to Persian) influence. The foreign sound of फ is dento-labial, while the true Indian sound is purely labial; and yet we often find Indians (who have come under English influence) pronouncing the फ even in Sanskrit words dento-labially: फ़ळ (*fala*) instead of फळ (*phala*).

To sum up:—The cardinal difference between Dr. Tessitori and me lies in the fact that while I trace the wide sound of ऍ-ऑ to अय-अव (through अय्-अव्) both in the case of original अय-अव as well as the अय-अव evolved by *prati-samprasāraṇa* from अइ-अउ, and the narrow sound of ए-ओ to अइ-अउ both in the case of original or derived अइ-अउ by *samprasāraṇa* from अय-अव, Dr. Tessitori inverts the process and believes the wide sound to have come direct from अइ-अउ (original or derived by *samprasāraṇa* from अय-अव) and the narrow sound direct from अय-अव, (original only, I suppose; for a derived अय or अव will necessitate *prati-samprasāraṇa* which is not recognised in the learned Doctor's phonetics, at least in this connection). I base my conclusions on the phonal impossibility involved in tracing the wide sound from अइ-अउ direct and the narrow one from अय-अव direct. I hope I have given sufficient reasons in support of my conclusions in this paper, supplementing those given in my two contributions to the Indian Antiquary on this subject.

APABHRAMŚA LITERATURE AND ITS IMPORTANCE TO PHILOLOGY.

By P. D. Gune.

1. The importance of the Apabhraṃśa language and literature is very great. According to Pischel, we have to look upon Apabhraṃśa, not as one language or dialect, but as so many popular dialects of India. They also later on developed a literature of their own.

2. What is the extent of the Apabhraṃśa literature ? Until recently the only literature in Apabhraṃśa known to scholars and recognised by them as such, was what was found (a) in the fourth Act of Kālidāsa's *Vikramorvaśī*, (b) in Piṅgala's *Prākṛta piṅgalasūtra* (c) in Hemacandra's *Siddhahemacandram Sūtras* IV, 329 to 446, where he quotes from various sources, (d) in Hemacandra's *Kumārapālacarita*, otherwise called *Prākṛtadvyāśrayakāvya*, Sarga VIII vs. 14-82, which professedly illustrates his own grammatical rules, and lastly (e) stray pieces found in Jain legends[1] like the *Kālakācāryakahā* and that of the destruction of *Dvāravatī* and in Alaṃkāra[2] works like *Sarasvatīkaṇṭhābharaṇam*, *Daśarūpāvaloka* and *Dhvanyāloka*. It is to be remarked that only stray verses in Apabhraṃśa here and there are found scattered in these works. To the Apabhraṃśa verses in the *Sarasvatīkaṇṭhābharaṇam* (Borooh's edition) mentioned by Pischel, are to be added those at p. 58, 74, 76, 158, 174, 261, 348, 373. Besides, some verses are to be found

1. The text wrongly reads thus for सद्धु which the context requires.

2. Wrong for तिह

in the *Vetālapancaviṃśatikā*, *Siṃhāsanadvātriṃśikā* and in *Prabandhacintāmaṇi.*

The genuineness of the IVth Act of *Vikramorvaśī*, which was called into question by scholars like S. P. Pandit and Bloch, is now generally accepted.[3] But the fact remains that the act has suffered by the dictum of the above-mentioned scholars. It requires to be again edited with care by one who knows Prakrit well.

Pischel has not mentioned *Kumārapālacarita* as it was published in 1900, when his grammar was also in the press. The *Prākṛtapiñgala* has been edited again in the Bibl. Indica by Candramohan Gosha, 1902; but it is apparently no improvement upon Śivadatta and Parab's Kāvyamāla edition.

3. Since Pischel's time, there has been a considerable addition to our knowledge of the Apabhraṃśa literature. This is partly printed and partly yet in Mss.

I (a) The *Bhavisayattakahā* of Dhanavāla is a work entirely written in Apabhraṃśa. It is divided into twenty-two sandhi or chapters, each sub-divided into from 10 to 20, sometimes 25, *ghattā* stanzas. This work has been edited in the Gaekwad's Oriental Series by the late Mr. C. D. Dalal. It awaits an introduction only and will be out probably next year. It begins:—

जिणसासणि सारु णिद्धुअपावकलंकमलु ।
सम्मत्तविसेसु निसुणहुं सुयपञ्चमिहि फलु ॥
पणविप्पिणु जिणु तइलोयबंधु दुत्तरतरभवणिव्वूढखंधु ।
भव्वयणवयणपंकयपतंगु कयकसणमोहतिमिरोहभंगु ।
णीसेसभरियभुवणंतरालु उक्खयदुक्कम्मतरुमूलजालु ।
अविसाउ अराउ अकोउहल्लु कंदप्पदप्पदलणेक्कमल्लु ।

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3. Wrong for संजम

and ends:—

निसुणंतपढंतहं परिचिंतंतहं अप्पहिय ।
धणवालिं तेण पंचमि पंचपयार किय ॥

The author occasionally finishes a *sandhi* with his own name, *e.g.*

एत्तियए कहेवि धणवालि सरसइ नमिय ।
भविसत्तहो कव्वि संधि समाणिय पंचमिय ॥

This Dhanavāla or Dhanapāla and the Dhanapāla often quoted by Hemacandra in his *Deśīnāmamālā* can not be one and the same. The other Dhanapāla is the author of (i) *Ṛṣabhapancāśikā* (Ed. Kāvyamālā), (ii) *Pāialacchīnāmamālā* (edited by Bühler and Pischel, B.B. and Co. Bhavanagar) and (iii) *Tilakamañjarī* in MSS. According to the last verse of *Pāialacchī*, Dhanapāla completed the work in Saṃvat 1029,i.e.A.D. 973. He therefore belongs to the latter half of the 10th century A. D. In *Kumārapālaprabandha,* a late work of the 15th century, MS. 19]of 1869-70 of the Deccan College Collection now at the Bhandarkar Institute, mention is made in folio 79a of the *Ṛṣabhapancāśikā* of Dhanapala having been repeated by Hemacandra before Kumārapāla. This Dhanapāla was born in a Brahman family, and then turned Jaina whereas our Dhanapāla is born in the Dhakkaḍavaṇigvaṃśa, his parents' names being Māesara and Dhaṇasiridevi respectively.

(*b*). The *Kumārapālapratibodha* of Somaprabhācārya, (ed. Muni Jinavijayaji, Gaekwad's Oriental series) contains much Apabhraṃśa. This is a bulky Jain work, purporting to be the enlightenment of the young king Kumārapāla by the advice of the polihistor Hemacandra. It has five long Prastāvas broken by different *Kathās* or stories, drawn as illustrations of particular

merits or vices. Thus there is *Nalakathā* which illustrates the evils of dice-playing, *Pradyotakathā* as illustrating evils of debauchery, *Tārā* and *Rukmiṇīkathā* as examples of the virtue of faithfulness and the like. The bulk of the work is written in what Jacobi calls Jaina-Māhārāṣṭrī or simple Māhārāṣṭrī and contains both prose and poetry. One or two Kathās, e.g. that of *Makaradhvaja* are written in Sanskrit. But the last *Prastāva* is important from one point of view as it contains some entire *kathās* in Apabhraṃśa, such as (i) the *Jīvamanaḥkaraṇasaṃlāpakathā*, containing 105 stanzas in Apabhraṃśa; (ii) the *Sthūlibhadrakathā*, having 106 stanzas (with the exception of a very few Gathas in Māhārāṣṭrī) in Apabhraṃśa; (iii) the *Daśārṇabhadrakathā* which is half Apabhraṃśa and half Sanskrit. Besides Apbh. stanzas are scattered over the other parts of the work. e. g.

वडरुक्खहं दाहिणदिसिहिं जाइ विदब्भिहि मग्गु ।
वामदिसिह पुण कोसलिहि जहिं रुच्चइ तहिं लग्गु ॥ from नलचरितम्
खड्ड खणाविय सइं छगल सइं आरोविय रुक्ख ।
पइं जि पवत्तिय जन्न सइं किं बुब्बुयहि मुरुक्ख । from अमरसिंहकथा
अह कोइलकुलरवमुहुलु भवणि वसंतु पयट्टु ।
भट्टु वि मयणमहानिवह पयडिय विजयमरट्टु ॥ from अभयसिंहकथा
एक्के दुन्नय जे कया तेहिं नीहरिय घरस्स ।
बीजा दुन्नय जइ करउं तो न मिलउं पियरस्स ॥ from शीलवतीदृष्टान्त
सीहु दमेवि जु वाहिहइ इक्कु वि जिणिहइ सित्तु
कुमरि पियंकरि देवि तसु अप्पहु रज्जु समत्तु ॥ from नरदेवकथा

The author Somaprabha gives some information regarding himself in the *praśasti* at the end of the work. He was the pupil of Vijayasiṃhasūri, who again was the pupil of Ajitadevasūri. He wrote the work in the house of one Siddhapāla, who was a favourite of king Kumārapāla. He wrote it in (evidently Saṃvat) *Śaśijaladhisūryavarṣe*, i.e. 1241, which

corresponds to A.D. 1185, i.e. twelve years after Kumārapāla's death. He was therefore an immediate successor of the great Hemacandra.

(*c*) Another work containing some Apbh. is the *Upadeśataraṅgiṇī* of Ratnamandiragaṇin edited by H. B. Shah, Benares, V.S. 2437. (A.D. 1911.) This is a late work of promiscuous nature, full of Sanskrit and Prakrit quotations. The Sanskrit quotations are generally from the *Mahābhārata* and the *Śatakas* of Bhatṛhari and the prakrit from different Āgama works and other sources. There is little that belongs to the author, but that little is written in bad Sanskrit; e. g. *satrāgāro maṇḍitaḥ*, p.42; *Jambudvīpo jaladhiparighā-bhūṣitaḥ*, p. 142; *bumbāṃ pātayan*, p. 76 (from Gujarātī, *būm paḍavuṃ*); *kuṭumbaṃ vilapantaṃ dṛṣṭvā*, p. 67 etc. There are about 25 passages that can be strictly called Apbh.; there are some more which lie on the borderland of Apbh. and old Gujarātī. A few might be quoted here with advantage:-

पत्तपरिक्खह किं करइ दिज्जइ मग्गंताइं ।
किं वरिसन्तो अम्बुहर जोइ समविसमाइं ॥
सुन्दर सर असुराह दलि जल पीधउं वयणेहिं ।
उद्दयनारिंन्दिहिं कढीउं तीहं नारीनयणेहिं ॥

The author was a pupil of Nandiratna. This latter was the pupil of Ratnaśekharasūri, who again was the pupil of Somasundarasūri, the head of the Tapāgaccha.

(*d*). The *Supāsanāhacariyam* of Lakṣmaṇagaṇin, parts I & II (3rd to be out) edited by Pandit Haragovind Das Seth, Benares 1918, contains some Apbh. here and there. The body of the work is in Māhārāṣtrī. Some examples are:—

केवि मल्लव्व सज्जंति कमद्दहुरं अवरि गायंति सुहकंठरवसुंदरं ।
केवि उत्तालतालउलं रासयं कुणहिं करनच्चियं अवरि वरलासयं ॥

केवि हरिसुद्धरा तियसगलदहुरं कुणहिं हयहेसिंय केवि सुइबंधुरं ।
केवि गयगज्जियं कुणहिं मयाभिभलं अन्नि मुट्ठीहिं पहरन्ति धरणीतलं ॥
नय घिप्पइ सुसणेहि नहु विणइहि गुणिहि ।
नहु लज्जइ नय माणिण नहु चाडुयसयहिं ।
नय खरकोमलवयणि न विहवि न जोव्वणिण ।
दुग्गेज्झउं मणु महिलहं चिंतइ आयरिण ॥ p. 115
कईयावि महुरकलयंठकंठ सज्झाइ पयट्टइ ।
कईयावि गाहियसुअंधकुसुम देवच्चणि वट्टइ ।
कईयावि बहुभवभमणभावण मणि भावइ ।
कईयावि सुहरम्मि जिर्णधम्मि लीण मणु ठावइ ॥ p. 116

Besides stray verses at about sixteen places, there are Apbh. passages of considerable length at pages 50, 190, 212, 286, and 440.

II. Then there are some Jaina MSS. in Apbh. in different libraries. Many of them were not so far recognized as Apbh. works, as the catalogues put them under the promiscuous heading of Prakrit. Such are:—

(a) The *Sañjamamañjarī* of Maheśvarasūri, No.1359 of 1886-92 of the Deccan College Collection at the Bhandarkar Institute. It is written entirely in Apbh. and contains 35 verses in *dodhaka* or *dohā metre.* It begins and ends thus :—

नमिऊण नमिरतिअसिंदविंदसिरिमउडलीढपयवीढं ।
पासजिणेंस संयमसुरूवसंकित्तणं काहं ॥ १
समणह भूसणं गयवसण संजयमंजरि एह ।
सिरि महेसरसूरिगुरु कन्नि कुणंत सुणेह ॥

The *dohas,* only 35 of them in all as said above, are written in perfect style ; e. g.

संजमु सुरसद्धिहिं धुअउ संजमु मोक्खदुवारु ।
जेहिं न संजमु मणि धरिउ तह दुत्तर संसारु ॥
विरमणु पंचह आसवह इंदियानिग्गहु जत्थ ।
सकसायहं दंडह दमणु सतरस संजमु तत्थ ।
अलिउ मे जंपहु दुव्वयणु पर दूमिज्जइ जेण ॥

इक्किणि इंदिय मुक्कलिण लब्भइ दुक्ख सहस्स ।
जसु पुण पञ्चइ मुक्कला कह कुसलत्तणु तस्स ।
जा परदोस समुल्लवइ मिच्छपवत्तणसज्ज !
सा जीहा मह मुहकुहरि जिण जम्मवि म करिज्ज ॥

The MS. was written at the instance of Śāntisūri in Saṃvat 1561, i. e. A. D. 1505. Maheśvaraśūri must therefore have lived long before this. At the end of another work of Maheśvaraśūri, in the Government Collection at the Bhandarkar Institute, Saṃvat 1365 is mentioned, which is probably the year of the copy. If so, our author must have lived prior to A.D. 1309. The curator, Baroda central Library, mentions a Pattan Mss. of the *Dnyānapañcamī-kathā* by Maheśvara of 10th century Saṃvat. Is this Maheśvara and our author the same ?

(*b*) The commentary on this work by a pupil of Hemahaṇasaśūri is also important from our point of view. It is perhaps more valuable, as it is voluminous. The commentator must also have lived before A.D. 1505, the date of the copy of the *Sañjamamañjarī* together with its commentary. It contains lots of Apabhraṃśa quotations, some of very considerable length. The smaller ones are generally of the nature of *subhāṣita* verses that must have been familiar in the days of the commentator ; e.g.

दिट्ठइं जो नवि आलवइ कुसल न पुच्छइ वत्त ।
तसुतणइ नवि जाईइ रे हयडा नीसत्त ॥ fol. 716
रासहु कंधि चडावियइ लब्भइं लत्त सहस्स ।
आपहणे कारि कम्मडां हिया किसूरहि किस्स ॥ fol. 826
मरण ति बीहइं बप्पडा घम्मि जि मुक्का रंक ।
सुकिअ सुसंचिअ जेहि पर ते तिणिवार निसंक ॥ fol. 146

Here is a description of a city and its suburbs :—

अहिरामारामवणाउलाइं सुरसुरहिसमाण य गोउलाइं ।
जहिं सयवर बावीसइं वराइं कमसिरीअ समणिकेलीहराइं ॥

मयमत्तय मयगल गुलगुलंत वरतरल तुरय घपमपधपन्ता ।
जिहिं रहवर धोरणि धडहडन्त फरफारक पाइक घमघमन्त ॥
जहिं कूव मणोहर सरवराइं नरनारी जणघणसुंदराइं ।
रमणीअरमणि जणु अच्छराइं जिहिं वहइ सरिअ किरिजलहराइं ॥
जहिं वसहि लोय अट्ठारवन्न जाहिं पउणबहत्तरि नरवरन्न ।
जहिं पवरचहुट्टइं मनवहुट्ट जलथलदीवंतरसत्थघट्ट ॥
जंहिं नागरसागर किरिनिवास जहिं लील करइं लीलाविलास ।
जहिं सुंदरमंदिरदेहुराइं नणु सिच्छइं लच्छीहरघराइं ॥ fol. 76

At folio 106 begins the story of a king of Takṣaśilā named Tivikkama or Trivikrama. This runs over three folios, and is given as an illustration of the merits of obeisance to Jina.

I shall only quote the beginning of the story, which is interesting in itself:—

अत्थि नामिण नयरु तखसिल । पंडिपक्खवच्छयलसिलमणिसिलोह सहबद्धसुरहर हरिणच्छि हरिणंकमुहमहिलचक्कचकंमणमणहर ।
घणकणकंचणरयणनिहि सुरपुरसरिसायारु ।
सेसु फणावलि किं ठियउ परिरंभिउ पायारु ॥
तहिं तिविक्कमु अत्थि नरनाहु तिअलोअविक्खाउ ।
जासि दलियसयलबलिरायविक्कमु । सरपंकयसंगहिय मंख नावइ तिविक्कमु ।
तासु मंगलदेवि पियकोमलकमलपयच्छि ।
रूवि विणिज्जिय रइरमणि कणयच्छवि नं लच्छि ॥ fol. 106.

It is to be noticed that this commentator also, like the commentator on *Upadeśataraṅgiṇī* quotes from various Sanskrit and Prakrit works like the *Mahābhārata*, *Vāyu* and *Matsya* Purāṇas, the *Śatakas*-chiefly the *Vairāgyaśataka*-of Bhatṛhari, and the Prakrit Āgamas. Apabhraṃśa quotations like *rāsahu kandhi cadāviya* etc. at fol. 826 or *divasi pahillai pāhuṇu sonāsamu vīkāi* fol. 54a look like stray subhāṣita verses current in the author's time and show that there must have been a rich literature in Apabhraṃśa. The long story that he has quoted corroborates this view. It reads like what to-day is called Kahāṇī or Rāsa in folklore,

(*c*) The *Tisaṭṭhimahāpurisaguṇālaṃkāra* of Pupphadanta is an important work in Apabhraṃśa. It forms No. 370 in section X of the Catalogue for search of Mss. for the years 1879-80 and is entered as an incomplete Prakrit work in 304 folios. The Ms. is to be found in the Deccan College Mss. Collection, now deposited at the Bhandarkar Institute. The work is divided into sandhi or chapters, as most Apabhraṃśa works are, and has 27 such sandhis. The number of stanzas in a Sandhi varies from 15 to 25, sometimes however, a sandhi has only nine stanzas. *e. g.* chapter VI, or as many as 29, *e. g.* chapter IX.

It begins :—

सिद्धिवहूमणरंजणु परमणिरंजणु भुवणकमलसरणेसरु ।
पणविवि विग्घविणासणु णिरुवमसासणु रिसहणाहु परमेसरु ॥
सुपरिक्खिय रक्खिय भूअतणुं पंचसयधणुन्नयदिव्वतणुं ।
पयडियसासयपयणयरवहं परसमयभणियदुण्णयरवहं ।
सुहसीलगुणोहणिवासहरं देविंदथुअं दिव्वासहरं ।
जुइणिज्जिय मंदरमेहलयं पविमुक्कहारमणिमेहलयं ॥

etc. etc.

अवरुवि पणवि सम्मइं विणिहयदुम्मइं कोवपावविद्धंसणु ।
जसु तित्थि मइ लद्धउ णाणिसामद्धउ णिम्मलु सम्मइंसणु ॥

Every sandhi ends with the following words :—

इय महापुराणे तिसट्ठिमहापुरिसगुणालंकारे महाकइपुप्फदन्तविरइए
महाभव्वभरहाणुमण्णिए महाकव्वे सम्मइसमागमो णाम । etc.

(the name and number of the pariccheda or sandhi,) The poem is said to be approved by the most noble (king) Bharaha; but it is not clear who this Bharaha is.

The seventh stanza in sandhi I is important as it contains an explicit reference to the *Setubandha* of Pravarasena, side by side with that to the *Rāmāyaṇa*.

सियदंतपंतिधवलीकयासु ता जंपइ वरवायाविलासु ।
भो देवीणंदण जयसिरीह किं किज्जइ कव्वु सुपुरिससीह ॥
गोवाल्लिएहिं णं घणदिणेहिं सुरवरचावेहिं व णिग्गुणेहिं ।

मइल्यािचित्तहिं णं जरघरेहिं छिद्दण्णेसिहिं णं विसहरेहिं ॥
जडवाइएहिं णं गयरसेहि दोसायरेहिं णं रक्खसेहिं ।
आचाक्खियपरपुट्ठीपलेहिं वरकइ णिन्दिज्जइ हयखलेहिं ॥
जो वालवुड्ढसंतोसहेउ रामाहिरामलक्खणसमेउं ।
जो सुम्मइ कइवइ विहियसेउ तासु वि दुज्जणु किं परि ण होउ ॥
etc. etc.

The reference in line 7, by the words *vālavuḍḍha-santosaheu* is to Vālmīki and his work *Rāmāyaṇa* ; and that in line 9, *Jo summai käivai vihiyasëu* is clearly to Pravarasena of the *Setubandha* fame. In the ninth stanza the poet mentions several predecessors of his ; some, like Kapila and Vyāsa almost mythical, others like Bhāravi and Bāṇa of living memory. It is important to note that Puṣpadanta mentions Rudraṭa and not Hemacandra, when speaking about his knowledge of poetics. Had Hemacandra, who was looked upon as a literary colossus by all his Jaina successors, and quoted with reverence, lived before him, he certainly would have made respectful mention of his name, as for instance Somparabha has done (see supra). But it is to be remembered that he was a Digambara. The passage which deals with this subject is worth quoting and reads thus:—

अकलंक-कविल-कणयर-मयाइं । दिय-सुगय-पुरंदर-णयसयाइं ॥
दंतिल्ल विसाहिलुद्धरियाइं । णउ णयइं भरहवियारियाइं ॥
णउ पीयइं पायंजलिजलाइं । अइहास-पुराणइं णिम्मलाइं ॥
भावाहिउ × × × भासु वासुं । कोहलु कोमलगिरु कालिदासु ॥
चउमुहु सयंभु सिरिहरिसु दोणु । णालोइउ कइ ईसाणु बाणु ॥
णउ धाउ ण लिंगु ण गुणसमासु । णउ कम्मु करणु किरियाविससु ॥
णउ संधि ण कारउ पयसमत्ति । णउ जाणिय मइं इक्कवि विहत्ति ॥
णउ बुज्झिउ आयमु सद्दधामु । सिद्धतु धवलु जयधवलु णामु ॥
पडु रुद्दडु जडणिण्णासयारु । पडियाच्छिउ णालंकारु सारु ॥
पिंगलपत्थारु समुद्दि पडिउ । ग कयाइ महाकइ चित्ति चडिउ ॥
जसइंधु सिंधुकल्लोल सित्तु । ण कलाकोसालि हियवउं णिहित्तु ॥

हंउ वप्प णिक्खर कुक्खिमुक्खु । णरवेसें हिंडमि चम्मरुक्खु ॥
अइदुग्गमु होइ महापुराणु । कुडएण मवइ को जलणिहाणु ॥
अमरासुरगुरुयणमणहरेहिं । जं आसि कियउ मुणिगणहरेहि ॥

Many names in this passage are familiar to us, such as Kapila, Bharata, Patañjali, Bhāsa, Vyāsa, Kālidāsa, Bāṇa, Harṣa, Rudraṭa, Piṅgala. But others like Akalaṃka, Kaṇayara, Purandara, Dantilla, Visāhila, Kohila, Svayambhu, Droṇa, Īśāna are obscure. The writer of the marginal notes—and they are sometimes very helpful as I find—has tried to give some informā-tion regarding them. According to him Akalaṃka is Nyāyakāra (?)-kartā, Kaṇayara is Vaiśeṣikadarśan-amulakartā, Purandara is Cārvākamate-granthakartā, Dantilla and Visāhila with Bharata are writers of works on Music; the last four are poets about whom the writer of the marginal notes does not enlighten us.

This work also possesses considerable poetic merit. The author has command over metre and language, and uses similes that would do credit to a Kālidāsa; *e. g.*

जहिं कोइलु हिंडइ कसणपिंडु वणलच्छिहिंणं कज्जलकरंडु
उपयरइ सरोवरिं हंसपंति चलधवल णाइं सप्पुरिसावित्ति ।
जहिं उच्छुवणइं रसगब्भिराइं णावइ कव्वइं सुकइहितणाइं ॥ 8*a.*

Before closing the brief account of this work, attention has to be drawn to the fact that the Mss. always has the cerebral *n* in place of the dental *n* in all positions. This appears to be the characteristic of the Apbh., which is ignored, e.g. in works like *Bhavisayatta-kahā* and *Sañjamamanjari.* In these latter works the *n* is made to follow its own fate in the Ardhamāgadhī. This has to be explained as due to the predilections of the scribes towards the language of their sacred lore.

(*d*) Lastly there are smaller works in *Apabhraṃśa* called Sandhi, *e.g.*, *Ārādhanā* 18 fol. and *Paramātma prakāśa* in 19 fol., *Cauraṅgasandhi*, *Bhāvanāsandhi*, *Rāsas and Stotras* at the Pātaṇa Bhandar. These were first mentioned by the late Mr. C. D. Dalal in the essay that he read at the Gujarāt Sāhitya Pariṣad, pp. 11 to 21. He has given a few quotations from some of them, and noticed others very briefly. They approximately number 15 Sandhis and 22 Rāsas.

5 Now what is the importance of the Apabhraṃśa literature so far brought to light? It is indeed very great and chiefly philologically.

(*a*) In the first place it shows us the parent of some of the modern vernaculars, especially the Gujarātī and Rājasthānī. The printed works and Mss. of Apabhraṃśa so far known to us almost exclusively hail from that part of India where the two languages are spoken to-day.

The nom. sing. neuter in *u*-or—*ū*, as in *viramaṇu*, *maṇu*, the nom. pl. of *a* bases in—*ā* or *a* as in *thoḍā*, *ghaṇā*, *Mora*; pronominal forms like *amhe*, *tumhe*, the diminutive or endearing suffix - *ḍā* as in *hiyaḍā*, *kammaḍā*; the *ya* of the past participle as in *kiyäu*, *gayäu*, the possessive suffix - *taṇa* as in tāhaṃtaṇiya, pahitītaṇäie, the stray infinitive in *vuṃ* as in *jivīvuṃ*, the causal in—ḍa as in *bhamāḍiu* all these and several other forms remind us one partly of old Gujarātī and partly of Old Western Rājasthānī.

(*b*) In the second place, it makes clear that the words in the modern vernaculars not traceable to Sanskrit - and there are a host of such - are living *deśi* or words in the language of the people, rich in meaning and expression, which the cultured people had either lost or not acquired. Such are :—

Dhadahadanta (*Mar. dhaddhadṇeṃ*), *gulagulanta Chillara*, *simisimanta* Mar. (*śivaśivṇeṃ*), *rimijhimiri* (Mar. *rumjhum*), *Jhagaḍantu* (Mar. and Guj. *jhagaḍā*), *paṅguraṇa* (Mar. *pāṅgharūṇ*), *chadaya* (Mar. *sadā*), *ṭālijjai* (Mar. *ṭaḷaṇeṃ*) *dhukkau*, *ghulāi* (Mar. *ghoḷaṇeṃ*), *hiṇḍai* (Mar. hiṇdaṇeṃ), *pilliyāiṃ*, (Guj. *pelyuṃ*, Hindī *pelanā*), *halliyāeṃ* (Hindī *hilana*, Mar. *halaṇeṃ*), *khudai* (Mar. *khudṇeṃ*), *navallāū* (Mar. *naval*), *haṭṭa* (Mar. *hāṭ*) *ḍhakkā* and *huḍukka* (Mar. *ḍhakkā*) *tharaharāe* (Mar. *thartharto*) and a host-of others *bhasalu* pāhaḍu pābṛtam ! *caṭṭr* Mar ceḍā.

(c) In the third place, it throws an immense flood of light on the grammar of the Apabhraṃśa. Hemacandra is our principal authority in this matter although there are other writers like Caṇḍa, Mārkaṇḍeya, Kramadīśvara. For instance *Tisaṭṭhimahāpurisaguṇāiaṅkāra* and the *Sañjamamañjarī* contain forms not countenanced by Hemacandra and therefore also not to be found in Pischel. A few of them only are given here as illustrations :—

(1) The Nominative singular of Masculine bases in *a* often ends in - *o*, although - *u* is more frequent *e. g. Sampanno* khoho (fol. 28a), *pasāhio Mahāideu* and *capalattavajjio hayāvalēu* (fol. 31 *b*) *suramahiharo* (fol. 34b).

2 The Instrumental singular of neuter (and even of masculine) bases in–*a* ends in–*ihī* as frequently as in *ehī* or *ahi* mentioned by Hemacandra and Pischel ; *e.g.*, *cayaṇihī* (fol. 23a) nīsasihī (*Sañjama.* vs. 27), *puṇṇihi* (*Sañjama*, fol. 23a) *kammihī* (*Sañjama* fol. 101a). This evidently is only a weakening of the *e* in *ehī*. The same happens to the *ehī* of the Locative *e.g.*, *naraihī* (*Sañjama* vs. 6).

(3) The Locative singular of – *a* bases frequently shows the ending *mmi* which Hemacandra and Pischel do not teach; e. g. *māsammi caitti* (fol. 276).

(4) The Gen. postposition *kera* often takes the place of *taṇa*, e. g. siddhihikeräu (fol. 356).

(5) The Nom. sing. of the pron. *tvaṃ*, has also got the form *pai*, which (although nasalized) is prescribed for the Acc. sing. and Instr. sing. by Hemacandra and Pischel.

(6) The 3rd sing. Fut. of *bhū* has also *hohi*, in addition to the *hosai* of Hemacandra and Pischel; e. g., (fol. 27a).

(7) The causal has a suffix–*ala*, in addition to–*ada* mentioned by Hemacandra and Pischel; e. g. *dikkhālami* (fol. 24a & 28a), side by side with *bhamādai* etc.

(8) The absolutive shows forms like *daṭṭhūṇam* (fol. 28a), although rarely, along with the usual Apbh. forms like *pāvedi*, *paviseppiṇu* (fol. 29a), which are very common.

(9) The abstract temination–*ttaṇam* and–*ppaṇam* also appears as–*ppuṇam*, although rarely. There are cases of–*tta* also; e. g. *capalatta* (fol. 31b).

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5. Three syllables have been rubbed out here, owing to two pages having stuck together and then torn as under by some one. The first appears to be the last.

It is not unlikely that it was, as the marginal note suggest, Bhāravi, the celebrated Sanskrit poet.

6. This is perhaps the scribe's mistake for.

THE DIALECTS OF BURMESE.

By. L. F. Taylor.

1. Sir George Grierson has placed it upon record that "most of the dialects belonging to the Burma group are all but unknown, and only the classical language of the Burmese literature, as it is spoken by educated Burmans, has been made available to philologists." This paper, therefore, which is based on the comparison of nine different dialects of Burmese, opens up a new subject.

Last year gramophone records were prepared by the Burma Government, at the request of Sir George Grierson, in twenty-nine of the languages and dialects found in the Province. These included eight of the dialects considered herein. In order that the pieces recorded might be properly understood, and in the absence of anything but the scantiest information concerning the dialects of Burmese, the Local Government sent me out on tour to investigate these different forms of speech in situ. The result is that we now possess (at present in manuscript) outline grammars and lengthy vocabularies of many languages which had hitherto remained uninvestigated. It is upon some of these materials that the present study is based.

Should results of any value appear in this and in subsequent papers, our thanks will be due to th Hon'ble Mr. C. Morgan Webb, Chief Secretary to th Government of Burma, who has not only suggested and made possible these investigations, but who has also advocated strongly the institution of a Linguistic Survey for Burma to supplement the Survey conducted

by Sir George Grierson for India. For my part I owe much also to Mr. Mark Hunter, Director of Public Instruction, who has not only permitted me to work outside his department but has also assisted me by his advice and encouragement. For any defects in the treatment of the materials, I alone must accept responsibility.

2. A word is here necessary on the meaning of the word dialect. If we travel to any civilized part of Upper or Lower Burma, between say Rangoon and Shwebo, we shall find that the medium of communication is a language called Burmese. Knowing this language we can enter into conversation readily in any place. Nevertheless we shall discover slight variations in pronunciation and idiom here and there. These, however, are too insignificant to arrest our attention. We shall, therefore, be justified in regarding this language as uniform and the local variations as of insufficient importance to be termed dialects.

If on the other hand we travel to Tavoy or to Arakan, or if we should happen to stay for a while in the villages near the Uppermost Defile of the Irrawaddy, we shall find ourselves considerably puzzled to know what is being said to us. In a week, however, or a month or in three months as the case may be, we shall discover that we can get along quite well. The sounds which were formerly so strange will now appear to be Burmese words strangely pronounced, and the grammar will appear to be the same as the grammar we have been used to. In a word we shall recognise, and learn sufficiently well to understand it, a dialect of Burmese.

It is with dialects of Burmese, in this sense of the term, that we shall deal in this paper. Of such dialects there are perhaps eleven or twelve, but I have been able to investigate nine only, including Burmese itself.

It may be mentioned in passing that materials have been collected also from the languages of the more uncivilized peoples. Five or six of these languages which bear no superficial resemblance to Burmese, are found on close study to be so similar to it in grammar, idiom and even in vocabulary when we have determined the phonetic laws that hold, that we must set them down too as dialectical variations. I have not sufficient time, however, to embody them in the present investigation and must set them aside for future occasion.

3. The dialects with which we are concerned are the following :—Burmese ; Arakanese; Tavoyan ; Intha ; Danu ; Yaw ; Samong Hpon ; Megyaw Hpon, and Taungyo. A few preliminary remarks may be made about each of them.

BURMESE. This is the lingua franca of the country. I have already referred to its uniformity above. The literary language differs somewhat from the colloquial in being more conservative and more uniform. It is the colloquial form, however, that I have chosen for my present purposes. The pronunciation of Burmese has changed considerably during the last thousand years if we are to judge by the spelling of the oldest stone inscriptions. There can be no doubt that Burmese, when it was first written, was written phonetically ; and by a study of the old inscriptions we can measure with some accuracy, the changes that have taken place. It has, therefore, been urged more than once that any comparison of the vocabularies of the dialects of Burmese ought to be made with the old Burmese of the inscriptions and not with modern colloquial Burmese. This is, in the main, a right contention. It is equally true however that only by

a study of the sounds in the dialects can we be really sure what the pronunciation of the oldest written Burmese really was. Seeing, therefore, that my present limits confine me to the comparison of dialects and exclude any investigation of old Burmese, I have chosen the Burmese colloquial speech simply as one of the nine dialects to be compared The investigation of the sounds of Old Burmese is, therefore, left to a later occasion. The old spellings (which often differ considerably from the modern spellings) are being collected for me, and no work of any value can be done until this task shall have been completed.

ARAKANESE. This is the speech of the civilized peoples of Arakan. The pronunciation differs a good deal from Burmese. In many ways it is more archaic, sound and spelling being in agreement. Tentatively we may consider the sounds of Arakanese as resembling those of Burmese when the language was first reduced to writing, about a thousand years ago. Arakanese and Burmese must have parted from one another somewhere between one and two thousand years ago.

TAVOYAN. Tavoy is supposed to have been peopled by colonists from Arakan, and the language is said to be Arakanese which has undergone change and which has been influenced by Siamese. It does undoubtedly resemble Arakanese in many respects and popular opinion may be correct. I doubt, however, whether Siamese has exercised as much influence as has been supposed.

INTHA. In Yawnghwe in the Southern Shan States a strange people is to be found who live on the Inle Lake and in the neighbouring villages. They are said to have migrated thither from Tavoy some six

hundred years ago. The language is in many respects archaic and does resemble Tavoyan. The Inthas are undoubtedly much mixed in race, but they have preserved their language in a fair degree of purity.

DANU. The Danus live near to the Inthas. What they are racially cannot be determined. Probably they are a mixture. Their language, however, is most distinctly a form of old Burmese with peculiar modifications of the vowel sounds which may be due to Shan or Taungthu influence.

YAW. The Yaws live in the Pakokku District. What they were originally has not been determined. I suspect, however, that they are civilized plains Chins who have adopted Burmese speech within the last four or five hundred years. Of all the dialects of Burmese, this most resembles Burmese.

HPON. The Hpons are a small community who live on the defile of the Irrawaddy between Bhamo and Myitkyina. They are referred to in Chinese History as having been settled in South-West Yunnan sometime before the eighth century A. D., and they came into Burma about six hundred years ago. They claim that they lived in Burma before they went into Yunnan, and the probability of this is borne out by their language which, although it is on the very verge of extinction, is still well remembered by a few old men. It is unmistakeably a dialect of Burmese (it has now become divided into two sub-dialects, the Samong and Megyaw) though very archaic in form, much more so in fact than Arakanese. Many words which occur as monosyllables in other dialects of Burmese are still to be found as disyllables in Hpon, and evidence points to this as being the older form. Hpon alone provides many of the intermediate forms

of words, which are essential for the successful linking up of Burmese with other Tibeto-Burman forms of speech. Without a knowledge of Hpon, the study of the history of the Burmese language is impossible.

TAUNGYO. This is another primitive form of Burmese. It is spoken in the West of the Southern Shan States. It preserves many very archaic features, such as the original "l" sound which is often represented in Arakanese by "r" and in Burmese by "y". On the other hand it has suffered much phonetic decay, so that a Burman will not recognise it as a form of Burmese at all. Nevertheless it has preserved a wonderful degree of purity and freedom from admixture and is a dialect of Burmese beyond all possibility of doubt. I suppose it to have branched off from the parent stem some two thousand years ago. It is are older dialect than Arakanese.

Syntax and Grammar.

4. On examination we find that the syntax and grammars of these dialects are almost identical with one another and with Burmese. In describing briefly then the structure of Burmese I shall be describing that also of the other eight dialects which we are investigating.

Burmese belongs to the Tibeto-Burman sub-family of the Tibeto-Chinese family of languages. It is an isolating language and is usually described as being "tonal and monosyllabic." This description is superficially correct. Burmese does possess three distinct tones for many of its syllables in addition to certain syllables ending with the killed consonants k, t, s or p which are not variable in tone and which in themselves are supposed by some authorities to constitute a fourth tone. This tone, if it be admitted

as such, would be confined to syllables of this class alone, and syllables of this class could not take on any of the other three tones. So far as "monosyllabism" is concerned, it is safe to say that many of the monosyllables of the present day are but poorly disguised disyllables, and there is now evidence that many of the undoubtedly monosyllabic words are but the result of phonetic decay acting on and disguising old words of two or more syllables.

The following are some of the characteristic features of the grammar and structure:—

I. The unit of speech is a root which does not correspond to any of our parts of speech. According to its place in the sentence, or by addition of some formative particle (itself originally a root), it may fulfil the functions of noun, adjective, verb or adverb. The term root is here applied to such a unit of speech, though the unit may itself be of secondary origin, a compound or fusion of roots of an older language period. They are primary roots, so far as the Dialects of Burmese are concerned, though they may be but secondary products in a wider sense.

II. The general order of the parts of the sentence is subject, object, verb.

III. Gender accords with sex. The sexes are represented either by distinct words or by particles indicating sex postfixed to nouns (or pronouns) of common gender.

IV. The plural is indicated either by collective adjectives or by a postfixed particle implying multiplicity.

V. The nouns and pronouns are indeclinable. "Case relations" are indicated by various postfixes which have the functions of English Prepositions.

VI. The adjective may generally precede or follow the noun it qualifies. In the former case a connective particle is, in some dialects, inserted between the adjective and the noun. Some adjectives are in some dialects confined by use to one or the other position only. The genitive precedes the governing noun.

VII. The adverb precedes the verb.

VIII. The verb is an impersonal root. The persons are indicated by the pronouns or subject. The tenses are indicated by postfixed particles. The transitive form of a verb is distinguished from the intransitive form either by the aspiration of the initial consonant or by the use of the auxiliary verb "to cause." The passive form may be distinguished from the active either by putting the subject into the objective case or by the use of the auxiliary verb "to suffer." Thus "me call" or "I suffer a calling" would be the passive forms of "I call."

IX. In common with almost all the languages of South East Asia we find the employment of numeral affixes in the enumeration of nouns. In such cases the noun generally comes first, the numeral next, and then follows a word descriptive of some quality of the noun. Thus for "two men",

"two needles", "two eggs" or "two houses" we must say "men two beings" "needles two long things," "eggs two spherical things" or "houses two structures." The same numeral affixes are to be found in all the dialects of Burmese, though Hpon employs some affixes which have probably been borrowed from the Shans.

5. Another feature that our comparison brings to light is the common possession of many idioms and compounds. It is common in Burmese to find two monosyllables united to form a compound word. Such monosyllables may usually, but not always, exist alone. We find however many of the same compounds occurring in every dialect. It is evident therefore that these are of great antiquity, having been formed before the dialects separated from the parent language. Similar idioms are also found throughout, thus to listen or obey is invariably rendered by "to erect the ear." These also must be of great age.

6. The individual words too are nearly always the same. That is they are the same etymologically though phonetically they differ. The following illustrations will make my meaning plain. The English word in each case will be followed by the Burmese, Arakanese, Tavoyan, Intha, Danu, Yaw, Samong, Hpon, Megyaw Hpon and Taungyo words.

To drop:—tfa tfa, kla, tfa, tfa, tfa, tfa, tfa, kla.

Horse:—mjin, mrey, bjin, hmjaj, meay, mjaj, ms, mjo, mle.

Become :—pjit, praik, pjit, pjeat, pjeat, pjit, pjit, pjit, plaik.

Stone :—dfauk, dfauk, kld, dzok, dzok, djauk, ka-lauk, ka-lok, klœ.

The proportion of words in the vocabularies of the various dialects which correspond to the words in Burmese varies between 70 and 98 per cent.

7. Having shown that the dialects are similar in structure and idiom and vocabulary, it follows that the essential part of our enquiry will be a study of the phonetic changes that words undergo as they pass from dialect to dialect. We must classify the words according to their sounds and meanings and study the phonetic changes that take place. We may reasonably expect that law and order will prevail and that we shall discover certain laws which regulate these changes.

8. This I have attempted to do, and the materials which I have employed are vocabularies of some eight hundred words in each of the nine dialects. For the sake of facilitating the work I have dropped out of comparison all compound words (for in these secondary changes take place) and words of Pali origin and have been left with a list of approximately five hundred monosyllables, the greater part of which are to be found in every dialect. The changes which these syllables have undergone have been tabulated and are given below in Table II. I have also analysed the sounds of these five hundred monosyllables into their ultimate elements and these have been arranged and tabulated in Table I. Table I therefore gives a list of the phonetic elements to be found in each dialect and the combinations in which they occur. Table II gives a list of the combinations of these elementary sounds into syllables and shows how the latter change from dialect to dialect. It must never be forgotten, however, that these tables do not profess to be the result of an exhaustive study of all the sounds to be found in these

dialects. They are the result of the analysis and comparison of vocabularies of five hundred words. More than this they do not pretend to be. They have been grouped in accordance with their spelling in Burmese. This has been done because trial has shown that such is the logical and proper arrangement.

9. We may divide words into four groups, according to their sounds. In the first group are included those words which occur as simple vowel sounds. The second group includes words which commence as a vowel and which terminate in a nasal or in a "killed consonant." The third group includes words which commence with a consonant and which end in a vowel, whilst in the fourth group are included the words of triple formation. They commence with a consonant (or combination of consonants) which is followed by a vowel (or diphthong) and they terminate in a nasal or with a killed consonant. The words in the first three groups may, for the sake of convenience, be regarded as special forms and we may represent the typical word by the definition which has been applied to the words in group four.

Since however the killed consonants are not really pronounced but only modify the preceding vowel, and since the only real finals are n and ng, it follows that it will be sufficient in Table II to trace the changes that our syllable undergo first when arranged according to their initial sounds and secondly when arranged according to their middle or vowel sounds.

10. So far I have dealt with facts. In this concluding paragraph I wish to deal with something which has not yet been established, but which is indicated by the materials that have been collected. I do not claim originality for the hypothesis that I am about

to express, I content myself with asserting that thenew materials tend to strengthen it and encourage us to believe that some day it will be either confirmed or refuted.

If we investigate words in the Indonesian languages we find that they have a definite structure. In the first place there is a definite root, consisting generally of three sounds: a consonant, vowel and final consonant. From these roots are formed word-bases. The bare root may become a word-base, or the reduplicated root may do so, or roots may be combined and form a word-base, or finally the word-base may be formed from the root by formative particles which may be prefixes, infixes or postfixes. Finally, by the extension of the word-base by reduplication or formative particles are formed the bulk of the words of the Indonesian dialects. All this can be demonstrated with certainty because the Indonesian words are polysyllabic and phonetic decay, though sometimes great, has not disguised the traces.

I believe that something of the same sort has occurred in the monosyllabic languages of the Tibeto-Burman group if not in all the mono-syllabic languages of South East Asia. I must however confine myself here to Burmese and its dialects.

I believe that in the history of Burmese, as in Indonesian, roots were converted into word-bases, and that word-bases were extended until a large vocabulary had been built up. Such words must have been polysyllables originally and must have betrayed the nature of their origin. At a later date phonetic decay set in on an almost unprecedented scale and these polysyllables became shortened and simplified into monosyllables. But this is the source of all our difficulties. Polysyllabic Burmese (or rather proto-Burmese) could have

been analysed and studied. Monosyllabic Burmese however defies analysis. Nevertheless certain indications may be pointed out.

I. If we look through a Burmese Dictionary we are arrested by many words which have similar meanings and similarity in sound. For instance (i) a wa, an orifice ; win, a fence round an enclosure ; wut, to dress or wear ; wun, to be round or circular ; wun, the belly ; we, to overflow or distribute ; we, to run round an object ; we, a whirlpool ; we, to fly round an object ; waik, to curve round ; waiylh, to encircle ; etc. etc. (ii) la, to come ; la, to advance ; lun, to exceed or trespass ; ahlun, exceedingly ; lan, a road ; law, to err or wander ; hlwe, to divert. etc. or (iii) kin, to cook; dfet, to cook; dfat, a word connected with cooking places, soot, etc ; dgo to boil to a pulp ; dfwan, to be burnt up; dfauy, to feed, tend; dfwe, to give a meal ; tfet, to cook, tfit to be burnt, as food in cooking;-and so on· I could give dozens of such groups of words, but those given already are typical of the rest. In some instances I have discovered twenty-six different words which are similar in sound and meaning.

I think we may safely conclude that there is a common root submerged in every one of the words of each group. This root has in each case been extended and modified in meaning by various formative elements which have been attached to and become fused with it.

II. That it was possible for formatives to have modified words is indicated not only by what has been said immediately above, but also by the fact that a similar thing can be seen to-day. The transitive verb is formed from the intransitive by the aspiration of the initial consonant. Thus from no, to wake, we form hno, to awaken; from nit, to be drowned, we form

hnit, to drown something else; from le, to fall we form hle to fell; from dfa, to fall we form tfa, to drop etc. etc. This illustration does not, of course, afford us any proof, but it encourages us to hope that a minute comparison of Burmese words may enable us in time to effect at least a partial analysis.

III. Some few words which occur as monosyllables in Burmese, occur as disyllables in Hpon. We will consider two instances.

The word for tiger in Burmese is dfa, in Hpon it is kă-la. The word for stone in Burmese is dfauk, in Hpon it is kă-lauk. The "kă" is a common prefix in Hpon, and many words cannot exist without it. Now the "l" in Hpon corresponds very frequently to "y" in Burmese. Thus I suppose kă-la and kă-lauk to have become kă-ya, and kă-yauk. These forms would telescope at once into dfa and dfauk. That "l" was the original sound contained in these words is proved conclusively by a comparison of the same words in other languages of the Tibeto-Burman family and even in the dialects of Burmese itself. Thus for tiger we get "kla" in Tavoyan and "klaw" in Taungyo. For stone we find "klaw" in Tavoyan and "Klœ" in Taungyo. We have, therefore, in the Burmese words cha and chauk, succeeded in proving the fusion of a prefix with a root.

All this, however, requires further investigation, and the materials that have been collected should prove of value. I hope to deal with the subject more fully at a later occasion. The illustrations given above are not all that I have been able to collect, they are just sufficient to indicate the nature of the evidence upon which our hypothesis is based. Not until we know more of the word structure, not only of the Burmese,

but also of the Shan, Karen and Mon-Khmer languages shall we be able to understand their relationships with one another. Much less shall we be able to make any fruitful comparison of this order of languages with Indonesian or with the great order of agglutinating languages which extends across Eur-Asia from Hungary to Japan.

Phonetic Symbols employed.

The symbols employed are those of the "International Phonetic Association."

p', k', t', & s'. are the aspirated forms of p, k, t, & s.

θ is pronounced as th in "thin".
f „ „ „ th „ "that".
z „ „ „ z „ "zoo".
s „ „ „ s „ "ship".
z „ „ „ g in French "rouge". The English word "jar" would be writen dza.

R. & ʁ. The former resembles the noise made when gargling at the back of the mouth,
The latter an attempt to hiss from the throat.

n is pronounced as ng in "singer".

The other consonants have their common values.

y is pronounced as u in the French "pur".
e „ „ „ French è.
œ „ „ „ eu in French "peur".
æ „ „ „ a in "man".
a „ „ „ a in French "patte".
'a' „ „ „ a in "tar".
ə „ „ „ ĕ in "thĕ 'man". A short indefinite vowel.
ʌ „ „ „ u in "but".
ɔ „ „ „ aw in "claw".

o is pronounced as o in "go".
ŏ „ „ „ o „ "hot".

The other vowels as in Italian.

dś is written to indicate a sound intermediate between ts and dz.

°as in i°, e°, etc. indicates an abrupt termination; a sudden check to the vowel.

ᵏ, ᵗ, as in aᵏ, iᵗ, etc. indicates a consonant hinted at rather than pronounced. It has the effect of checking the vowel.

as in ĭ, ã, etc. indicates a nasalization of the vowel.

CLASSICAL LITERATURE.

THE RELATION OF ŚŪDRAKA'S MṚCCHAKAṬIKA TO THE CĀRUDATTA OF BHĀSA.

By S. K. Belvalkar.

1. Bhāsa, the famous dramatist, the theme of unstinted eulogy for Kālidāsa (*Mālavikāgnimitra*, i. 5), Bāṇa (*Harṣacarita*, Introd. st. 15), Vākpatirāja (*Gaüḍa-vaho*, st. 800), Jayadeva (*Prasanna-R.* i. 22) and others, has had a most strange reception at the hands of modern Sanskritists. When he was a mere name, the loss of even the most distant trace of his works or their names was universally deplored as a great disaster to Sanskrit literature ; but when by a happy accident a number of his works were discovered and brought to light by Mahāmahopādhyāya T. Gaṇapatiśāstri, many of us, refusing to believe in the great good news, essayed to prove that the author of the newly discovered 13 plays was not the great Bhāsa but perhaps a name-sake of his who has been variously assigned to the 6th, 8th, or the 10th century after Christ :—and this in face of the steadily growing mass of evidence which Mr. Gaṇapatiśāstri and others placed before the world in learned Prefaces and magazine articles. We do not wish to discuss in this place the question as to the genuineness of these plays or the date of their author, but limit ourselves to a more or less detailed comparision, especially from the point of view of dramaturgy, of the *Cārudatta* of Bhāsa and the *Mṛcchakaṭika* of Śūdraka—the two plays which have been on all hands admitted to bear to one another a relation the most unique of its kind in Sanskrit literature.

2. While Śudraka's *Mṛcchakaṭika* is a complete play in ten Acts the *Cārudatta* of Bhāsa, as is well known, ends with Act 4. Is the four Act play complete in itself; and if not, did Bhāsa write any more Acts ?—this is our first question. Now in spite of the colophon *avasitaṁ Cārudattam* which one of the two Mss. gives, it can be proved from internal evidence that the author of the extant four Acts of the Cārudatta intended to write more. Thus in Act i stanza 6, in the course of his lamentation on account of poverty, the hero is made to say—

Pāpaṁ karma ca yat parairapi kṛtaṁ tat tasya sambhāvyate.

"And a crime by others committed is from him suspected to emanate."

These words can have a significance only if the hero comes to be accused for a crime such as the murder of the heroine which is committed by others (Śakāra). This event does not take place in the course of the extant four Acts. Again in the same Act Śakāra, after discovering that Vasantasenā the heroine has given him the slip, utters the threat—*Ahake dāva vañcite kūḍakāvaḍaśīḷaye śauvahā dukkhaḍe kaḍe !*—"So you have dared to deceive *me*, the master of those that deceive! A bitter end is in store for you." And later in his message to Cārudatta, he conveys a similar threat in the words—*Vaśañcaśeṇiā ṇāma gaṇiāddāriā . . . . . ammehi baḷḷakāreṇa ṇiamāṇā mahanteṇa śuvaṇṇāḷaṁkāreṇa tava gehaṁ paviṭṭāḥ Śā śuve ṇiyyādaidavvā. Mā dāva tava a mamu a dāḷuṇo khoho hodi tti, etc.*—"The courtizan's daughter by name Vasantasenā, about to be led away by us in force, has, *with great golden ornaments,* entered your house.

Send her back to-morrow for fear lest there might ensue a great quarrel between you and me." The expectancy here raised has not been fulfilled in the existing four Acts. Śakāra somehow wished to make the revenge turn upon the great golden ornaments : but just how is not clear.

3. A similar unfulfilled expectancy confronts us in the next Act. For instance, the Saṁvāhaka (shampooer), who takes to gambling, and is rescued by Vasantasenā from the clutches of his creditors, longs to return the obligation but finds no opportunity, just as in Act four Sajjalaka (=Śarvīlaka) leaves the stage with the pious but unfulfilled wish—*Bhoḥ ! Kadā khalvasyāḥ pratikartvyaṁ bhaviṣyati*—"Oh ! When can it be possible for me to requite her ? " Dramatic Justice requires that an opportunity be given to these persons to do what they so ardently long for ; otherwise their very introduction into the play becomes absolutely void of meaning.

4. Lastly consider the case of Cārudatta himself, the hero of the play. Bhāsa introduces him to us as a poor man—but not without a hope of someday being able to regain his fortune : cp. 1.5—*Bhāgyakrameṇa hi dhanāni punar bhavanti.*—"By another turn of fortune riches may come back again." Here again dramatic justice requires that this hope be fulfilled : that the merits of the hero be adequately rewarded. Nothing of the kind takes place in the course of the four Acts of Bhāsa. On the other hand an additional monetary misfortune falls upon the hero in the shape of the theft of Vasantasenā's ornaments* from his house. And although the ornaments are ultimately restored to the rightful owner, the point to note is that Cārudatta

never knows of this fact. Yet more strange perhaps is the circumstance that while presumably one of the main themes of the play is the love and the ultimate union of Cārudatta and Vasantasenā, this never actually takes place in the first four Acts. At the end of Act 4 the heroine does indeed start as an *abhisārikā* to meet Cārudatta in his house, taking along with her the stolen ornaments (*imaṁ aḷaṁkāraṁ gaṇhia*) and regardless of the clouds gathering overhead; but the rest is all silence! It is clear that no audience can ever be ready to tolerate such a tantalizing end to an otherwise perfectly interesting play.

5. The conclusion is therefore inevitable that the author of the *Cārudatta* did contemplate writing more than the existing four Acts. We may therefore rest in the pious expectation that the remaining Acts of the *Cārudatta* will one day be discovered, and for the present account for the separate existence of the first four Acts (and incidently of the colophon *avasitaṁ Cārudattam*) by assuming that it was perhaps customary to divide a longer play, for purposes of stage representation, into two or more smaller parts not quite on the analogy of the Trilogies and Tetralogies of the Greek and Elizabethan Stage, but rather like what is sometimes done on our modern stage (and even occasionally by some of our Universities who are expected to know better) when they divide Kālidāsa's Śākuntala into two parts: 1-4 and 4-7, both inclusive. Or as an alternative hypothesis we may assume that death or some such thing came in the way of the proper conclusion of play. The last hypothesis rules out of court the view that the Cārudatta of Bhāsa is an abridgement of the Mṛcchakaṭika, and we will not therefore here take that hypothesis into account.

6. But limiting ourselves to a critical comparison of the extant portion of the *Cārudatta* with the corresponding portion of the *Mṛcchakaṭika*, can we come to any definite conclusions as to the priority of the one over the other? I believe that we can. Let us therefore consider the evidence both ways.

7. The view that the *Cārudatta* is an abridgement of the *Mṛcchakaṭika* is rendered *prima facie* probable by the circumstance that the former does not contain Vidūṣaka's tiresome description in Act 4 of the eight quadrangles in Vasantasenā's house, or the Robber's lengthy effusion (in eight verses) on the fickleness of women in the same Act; nor again the low-life realism exhibited by Śūdraka in the rather lengthy intermezzo in Act 2 wherein we are introduced to Māthura, Saṁvāhaka, Dyūtakāra, and Darduraka—to say nothing of the considerable shortening in the chasing scene in Act 1 (19 stanzas and 74 prose lines in the *Mṛcchakaṭika* as against 14 stanzas and 52 prose lines in the *Cārudatta*,) or in Cārudatta's lamentation on poverty (10 stanzas in the *Mṛcchakaṭika* as against just 5 in the *Cārudatta*) in the same Act, or in the Robber's preamble on the philosophy of theft in Act 3, besides a number of minor omissions too numerous to specify. As it is perfectly conceivable that a play like the *Mṛcchakaṭika* should have been shortened for stage purposes, there are a number of scholars who refuse to subscribe to Mr. Gaṇapati Śāstri's view that the "short play of *Cārudatta* has been amply enlarged by the addition of fine passages, which render the plot even more interesting, and has, under the name of *Mṛcchakaṭika*, become famous as the work of Śūdraka."

8. But it does not seem to have been sufficiently

realised that the *Cārudatta* of Bhāsa is in some places more extensive than the play of which it is presumed to be the abridgement. Thus consider the soliloquy of Vidūṣaka in the first Act immediately after the Prologue (25 lines in Bhāsa as against 16 in Śūdraka) and note in particlular the words—*Eso vāā paccācakkhido hiaeṇa aṇubandhīamāṇo gacchīadi;* and further—*Mama udaraṁ avatthāvisesaṁ jāṇādi. Appeṇāvi tussadi. Bahuaṁ vi odaṇabharaṁ bharissadi dīamaṇaṁ, ṇa āedi adīamāṇaṁ, ṇa paccācikkhadi* :—words which are of great significance for the character of Vidūṣaka, the avaricious and withal the loyal Brahman friend of the hero. Similarly in the chase scene Śūdraka does not give the bragging speech of Viṭa—*Vasantasene, sarvatra bhayānabhijñahṛdayaṁ māṁ kuru. Paśya:*

> *Paricitatimirā me śīladoṣeṇa rātrir*
> *Bahalatimirakālāstīrṇapūrvā vighaṭṭāḥ;*
> *Yuvatijanasamakṣaṁ kāmam etanna vācyaṁ*
> *Vipaṇisu hataśeṣā rakṣiṇaḥ sākṣiṇo me.*

which again has a particular bearing upon the character of Viṭa as also upon the *morale* of the Ujjayinī of the day. In fact the character of this Viṭa as Bhāsa paints him is most cowardly and contemptible and has none of the culture and other relieving features of Śūdraka's Viṭa. Thus for instance Bhāsa's Viṭa, at the sight of Cārudatta's Ceṭī, as she was issuing out of the house, himself conceives of the dastardly plan of maltreating her and of offering her to Śakāra as a substitute for the lost Vasantasenā : cp. his speech—*Bhavanānnirgatya kācid iyam āgacchati. Bhavatu anayā varākaṁ vañcayāmi.* And when Śakāra says—*Jāṇāmi śaḷayogeṇa ṇa hoi Vaśañcaśeṇiā,* he even tries to

convince him that the lady is Vasantasenā herself—

Eṣā raṅgapraveśena kalānāṁ caiva śikṣayā

Svarāntareṇa dakṣā hi vyāhartuṁ ; tanna muñcyatām.

It is evident that such a total change in the conception of a character—a change again which is not a change for the better—is beyond the province of the mere abridgement-maker. A few more cases tending to disprove the view that Bhasa's play is an abridgement will now be exhibited in parallel columns without any comment:—

BHĀSA	ŚŪDRAKA
P. 17, Act i. st. 20.	Absent.
P. 42, Ahaṁ pi teṇa ayyeṇa abbhaṇuññādo : aṇṇaṁ uvaciṭṭhadutti. Kahaṁ aṇṇaṁ erisaṁ maṇussaraaṇaṁ ḷabheaṁ ti, kahaṁ ca tassa komaḷaḷaḷidamahurasarīrappari-sakidatthaṁ me hatthaṁ. sāhāraṇasarīrasamaddena soaṇīaṁ karissaṁ ti jādaṇivvedo daddhasa-rīrarakkhaṇatthaṁ jūdo-vajīvī saṁvuddo.	P. 112 (B.S.S.), Cālittāva-śeśe a taśśiṁ jūdovajīvi-damhi śaṁvutte.
P. 53, The short dialogue between Vidūṣaka and Cārudatta before sleep :	Absent.
P. 57, Act iii st. 12 and the speech immediately preceding.	Absent.
P. 64, Act iii st. 16 and the speech of Vidūṣaka which is the occasion for it.	Absent.
P. 67, Act iii st. 18.	Absent.

P. 81, Gaṇikā (ātmagatam) —Dhikkhu gaṇiābhāvaṁ. Luddhatti maṁ tuḷaadi. Jai ṇa paḍicche so jjeva doso bhavissadi. (prakāśam) Āṇedu ayyo.

P. 214, Vasentasenā (vihasya sakhīmukham paśyantī)—Mitteya kadhaṁ ṇa geṇhissaṁ raaṇāvaliṁ? (iti gṛhītvā pārśve sthāpayati.)

9. But it may be argued that the author of an abridgement may occasionally find it necessary to expand the original for the sake of better dramatic effect ; and although none of the passages we have hitherto adduced are capable of being thus explained away, yet, granting the truth of the proposition, it follows as a necessary corollary to it that the author of the abridgement will at least endeavour not to spoil the effect of the original by introducing inartistic, meaningless, and even absurd speeches of his own composition. But this is what Bhāsa must be supposed to have done if he is to be placed after Śūdraka. Thus in Act 4 whatever reason we might assign to Bhāsa's having ushered Vidūṣaka into the presence of Vasantasenā earlier than the Robber, nothing in my opinion can justify Vasantasenā's direct and unskilful accusation of the Robber in the words—*Ahaṁ jāṇāmi tassa gehe sāhasaṁ karia āṇīdo aaṁ aḷaṁkāro.* It is quite inconceivable that with that skilful management of this part of the dialogue by Śūdraka before one's eyes even a third-rate dramatist would commit such a glaring and unmotivated blunder. A somewhat similar comment has to be made in regard to the dialogue which ensues in Act i between the hero and the Gaṇikā whom he mistakes for Radanikā.

10. Then again if the *Cārudatta* of Bhāsa is an abridgement of Śūdraka's *Mṛcchakaṭika*, what could

have been Bhāsa's motive in studiously avoiding all reference to the political revolution at Ujjayinī which forms the background of Śūdraka's play? Śūdraka alludes to it in the Prologue (P. 13) and again in Act 4 (P. 189), and we know that in the dénouement it is through this political revolution that it has become possible for the poet to accord poetic justice to all the parties concerned. It is too much to expect that the author of the abridgement would omit this important bye-plot and yet preserve the main features of the play unchanged, which he must do as an epitomiser. On the other hand the addition of a bye-plot is what properly belongs to the province of an elaborator of an earlier shorter version of the play.

11. The argument based upon an aesthetic evaluation of certain stanzas in Bhāsa's *Cārudatta* with the corresponding stanzas in Śūdraka's *Mṛcchakaṭika*, where they are not absolutely identical, is rather of an illusive character and cannot yield decisive results. The work of the earlier writer is normally expected to be crude and less polished while that of the later writer should be more refined and poetic. But this is not an invariable rule; and if the later writer happens to be an elaborator rather than an epitomiser, and if the elaboration has been carried from some specific motive, no chronological conclusions of any kind are possible even as regards passages which all critics—by a sort of a literary miracle—agree to regard as poetically superior or inferior as the case may be. Although therefore we have collected a number of passages from Bhāsa which, according to us, are poetically superior, and a number of others which are poetically inferior, to the corresponding passages from Śūdraka, we abstain from making use of them for our present purpose, as

the argument is likely to cut both ways. We give below a few illustrations of what we mean—

BHĀSA	ŚŪDRAKA
P. 8–pūrvabalirūḍhayavāṅkurāsu.	P. 19–samprati virūḍhatṛṇāṅkurāsu.
P. 10–atthavāvārā govadāraā via masaabhīdā gihādo ṇiggacchandi.	P. 22–atthakallavattā varadābhītā via govāladāraā jahiṁ jahiṁ ṇa khajjanti tahiṁ tahiṁ gacchanti.
P. 12–Vegādaham pracalitaḥ pavanopameyaḥ Kiṁtvām grahītum athavā na hi me'sti śaktiḥ ?	P. 29–Vegādaham pravisṛtaḥ pavanaṁ nirundhyāṁ, Tvannigrahe tu varagātri na me prayatnaḥ.
P. 14–Maḍe khu jo hoi ṇa ṇāma jīvai.	P. 35–Mumukkhu je hodi ṇa śe kkhu jīvadi.
P. 24–Na tasya kaścid vibhavair amaṇḍitaḥ.	P. 54–Na tena kaścid vibhavair vimānitaḥ.
P. 28 and elsewhere—Kāmadevāṇuyāṇappahudi.	P. 65 and throughout—Kāmadevāadaṇujjāṇādo pahudi.
P. 29–vivahantā via saaḍiaṁ duvviṇīdabaḷīvaddā aṇṇoṇṇaṁ saṁkiḷesandi. Ahaṁ dāṇi kaṁ pasādemi. Bhodu, dāṇi Radaṇiaṁ pasādemi. Radaṇie, pasīdedu pasīdedu hodī.	P. 67–duvevi tumhe susaṁpaṇṇā via kalamakedārā aṇṇoṇṇaṁ sīseṇa sīsaṁ samāgadā. Ahaṁ pi imiṇā karahajāṇusariseṇa sīseṇa duvevi tumhe paṇamia pasādemi, uṭṭhedhatti.

These are all passages taken from the first Act; the other Acts yield even larger material for comparison. In some of these passages the palm of superiority undoubtedly belongs to Bhāsa; in others to Śūdraka. But it is impossible to say what passage was written first and what was its second and improved edition. In short the aesthetic argument is an argument which cannot be used on either side of the question with any compelling force.

12. The considerations hitherto urged would probably enable us to arrive at the negative conclusion that there exist no valid reasons for regarding the *Cārudatta* of Bhāsa as a later abridgement of Śūdraka's *Mṛcchakaṭika.* Let us now look at the shield from the other side and determine if any positive reasons exist for regarding the *Mṛcchakaṭika* as the later elaboration of the Cārudatta. Now if we look at passages such as those mentioned in Para. 7 above as later additions, the motive for their addition becomes at once evident. It is partly to show off one's knowledge and familiarity with such highly technical and out-of-the-way facts as the inner arrangement of a wealthy courtizan's house or the scientific accoutrements of a professional robber, which were detailed in regular manuals now unfortunately, or rather fortunately, no longer extant; and partly to introduce broad humour and low-life realism. Indeed, that Śūdraka often makes a deliberate appeal to the gallery is capable of easy illustration. Consider for instance the speeches of Śakāra (P. 33) ending with—*Itthiāṇaṁ śataṁ mālemi : śūle hagge !* or those ending with—*Ido Bhāve ido Ceḍe : Bhāve Ceḍe, Ceḍe Bhāve : Tumhe dāva eante ciśṭa.* (P. 47), or lastly those beginning with—*Ale kākapadamaśṭaśīśakā duśṭavaḍuakā, uvaviśa uvaviśa* (P. 56) in Act first ; then passing over the extremely humorous scene between the Shampooer, the Sabhīka, the Gambler, and that lovable rogue of a Dardurka, we may mention the little affair in Act iii between Vidūṣaka and Vardhamānaka about washing the feet, and in Act four Vidūṣaka's courteous (!) reference to Vasantasenā's old mother (P. 207f). Here the appeal is rather too broad, and no wonder if it at times transcends the bounds of what is proper or dignified. For instance, I have always thought that

it is extremely improper of Cārudatta to propose—*Vayasya Maitreya, tvaṁ udakaṁ gṛhāna; Vardhamānakaḥ pādau prakśālayatu.* The corresponding portion in Bhāsa is much more successful even as a humorous scene. So also in Act 4, after the description of the 8 quadrangles or courts of Vasantasenā's house, Śūdraka contradicts himself by bringing Vasantasenā into the Rukkhavāḍiā, whereas in the beginning of the Act she is seated in an apartment of her house having a gavākṣa. Such a violent shifting of scenes within an Act is an absolute heresy in a Sanskrit drama, and perhaps the only reason for the fact is Śūdraka's desire to thereby secure for Vidūṣaka in Act 5 an opportunity for the retort—

Vasantasenā—*Kā ṭumhāṇaṁ Rukkhavāḍiā vuccati?*

Vidūṣaka—*Jahiṁ ṇa khāīadi ṇa pīīadi.*

13. It would I suppose be admitted by all that Śūdraka could not have himself been the author of at least that stanza in the Prologue which speaks of Śūdraka's own death in the words—*Labdhvā cāyuḥ śatābdaṁ daśadinasahitaṁ Śūdrako 'gniṁ praviṣṭaḥ;* and there is further evidence to prove that the Dhūtā episode in Act 10 is added to the play by a hand later than that of Śūdraka. This being the case, it is conceivable that throughout the play a few stanzas here and there such as those on the fickleness of women, the miseries of poverty, and so on, got interpolated in later times. These stanzas are often extremely dull and superfluous. For example, stanza iii. 22 or iv. 23 and iv. 27. Even if we take away all such palpable addition from the present text of the *Mṛcchakaṭika,* and even if we agree to put up with the redundencies and the mythological solecisms *à la mode de* Śakāra (of which there

is little trace in Bhāsa), yet what remains of Śūdraka's play is, from the stage-manager's point of view an extremely awkward piece to deal with, whereas Bhāsa has such a fine and discriminating eye for the little details of time and place and situation and apparel (which can come only of an attentive study of the stage-conditions and a perfect imaginative identification with the several characters brought on the stage) that, whether the author of the newly discovered plays is to be regarded as the predecessor of Kālidāsa or not, it is evident that we must rank him as a dramatist of a very high order. A few illustrations will make our point clear—

Act i—Throughout the chase scene Cārudatta is seated in a part of his house not illuminated by any lamp; hence although the Gaṇikā presumably recognises the hero by his voice how natural it is for her, when Vidūṣaka comes back with the lamp, to ejaculate—*Dīvāḷoasūidarūvo so evva daṇi eso jaass kide ahaṁ nissāsamattalakhidaṁ sarīraṁ uvvahāmi!* Please note also how skilfully the return of Radanikā is timed.—Bhāsa gives us a clear idea throughout the chase scene of the topography of the city. The chase began upon a thoroughfare. Then Vasantasenā enters a lane which in Śakāra's words was *andhaaḷapūḷiśagaṁbhḷa*, and it is in this lane that the hero's house is situated. As the house was *sambhoamaḷīna* and as no rays of a lamp etc. streamed out of its windows and doors, that particular spot, as Vasantasenā correctly observes, was the darkest in the lane, and it was also a windy

night. We thus see that Bhāsa omits no circumstance that would lend probability to the events.

Act ii—After the heroic rescue of the Buddhist mendicant from the infuriated elephant, Karṇapūra naturally expects to receive some presents and not a mere profusion of praise; as he says—*Na uṇa kocci kiṁpi icchai dāduṁ.* It is at this that Cārudatta gives away his only *prāvāraka* and returns home *jaṇṇovavīdamattapāvārao*, as the heroine says. In Act three Vidūṣaka blames the hero for this his unconsidered charity. If it was through compassion, says he, a worthier object for it existed nearer at hand, viz., Vidūṣaka himself who in a cold night *bharidagaddabho via bhūmie paḷḷoṭṭhāmi.*

Act iii—The dialogue between Vidūṣaka and Cārudatta's wife after the theft is, in Bhāsa's *Cārudatta*, far more full of feeling and verve than the corresponding portion in the *Mṛcchakaṭika.* And Bhāsa wishes to preserve a system of time-indication for the play: the chase taking place on the ṣaṣṭhī, and theft on the saptamī, and the incidents of the last Act on the aṣṭamī,—which, because it involves an astronomical inconsistency (the Moon being made to rise at midnight on the ṣaṣṭhī in Act i and to set at about the same time on the aṣṭamī of the same fortnight in Act iii) is probably ignored deliberately by the author of the *Mṛcchakaṭika.* An improvement of this nature is more in the line of a later elaborator : it is

too much to believe that an epitomiser has allowed such a blunder to creep into the play when it was not originally there.

And generally it may be said that Bhāsa is more full and precise in his stage-directions than Śūdraka. Thus it is absurd to make Cārudatta sit down immediately after he has offered the *bali* in the beginning of Act i. He is in the courtyard outside and must re-enter the house. Then later, after the melée with Śakāra when Cārudatta discovers a stranger in the house and Vidūṣaka delivers the message of Śakāra, Bhāsa makes Vasantasenā say very properly—*Ayyasaraṇāgadamhi*; and Vidūṣaka's speech wherein he tells the hero that the stranger in the house is no other than Vasantasenā who has already, ever since the return from the Fare of Kāmadeva, conceived an affection for him, that speech is rightly made *apavārya* by Bhāsa. Śūdraka has no such refined ideas; he is often coarse to a fault. Compare the gross suggestion in Māthura's speech in Act ii—

Kiśśa tuhaṁ taṇumajjhe ahareṇa radadaṭṭa duvviṇīdeṇa

Jaṁpaśi maṇ aharavaaṇaṁ loāantī kaḍakkheṇa ?

And in Act 1 also towards the end it is absurd to make Cārudatta accompany the heroine in person in her return journey to her house; and absurder still is Vidūṣaka's speech —*Tumaṁ jevva edaṁ kalahaṁsagāmiṇiṁ aṇugacchanto rāahaṁso via sohasi.* But with an author bent upon making every

possible appeal to the gallery nothing bette
can ever be expected.

14. It is perhaps unnecessary to labour the point any further. An attentive study of the two plays along lines somewhat similar to those we have hitherto followed would convince any unbiassed reader that the *Mṛcchakaṭika* of Śūdraka is a deliberate amplification of the earlier play of Bhāsa, underaken from specific dramaturgic motives; and while therefore the elaborator has improved upon the original in a number of ways he has in the attempt sacrificed the unity, the delicate finish, and a portion of the beauty of the original, as was quite inevitable. The plays cannot possibly have been independent productions: the many identical and analogous passages in the two plays make such an hypothesis quite untenable. And whether the reason for Śūdraka's elaboration was the fact that the play had remained unfinished in the original, or it was simply a *kāvyārthacauryam* is, in the present state of our knowledge, more curious than profitable to inquire

15. M. Sylvain Lévi alone amongst Oriental critics has been from the first consistent in assigning the *Mṛcchakaṭika* to the 6th century after Christ, while all other scholars had agreed to regard the play as earlier than any of Kālidāsa's, and probably dating from the beginning of the Christian era. The discovery of Bhāsa's *Cārudatta* has unexpectedly strengthened Lévi's position, but if there be something in the argument based upon internal evidence (such as the form of the Prakrit) to make us still regard the *Mṛcchakaṭika* as earlier than the plays of Kālidāsa, and if Bhāsa is to be regarded—as we hope we have made it probable—as a predecessor of Śūdraka, this will not be without an indirect bearing upon the question of the date of Bhāsa.

A PSYCHOLOGICAL STUDY OF KĀLIDĀSA'S "UPAMĀS".

By P. K. Gode.

Every student of Sanskrit literature is quite familiar with the śloka, which begins with उपमा कालिदासस्य [1] and though the force of the quotation has gone home to many a reader of Kālidāsa, none has undertaken a critical survey of his Upamās, which are so charming and interesting not only to the students of Rhetoric proper, but also to the general lovers of literature. I propose to examine the above-mentioned remark on objective grounds. But in doing so my object is mainly psychological. I shall try to indicate, not only the poet's range of observation, his keen æsthetic sense, his penetrating intellect but the workings in detail of that unique faculty for noting comparisons, which is considered to be one of the "foundation-pillars of intellectual life."

I understand the word "Upamā" in the broadest sense of the term. Under it might be included not only all the figures based on similarity but also many more which escape the water-tight compartments created by Indian rhetoricians. For instance the application of maxims to particular situations in life necessarily postulates the process of comparison, and

[1] उपमा कालिदासस्य भारवेरर्थगौरवम् ।
दण्डिनः पदलालित्यं माघे सन्ति त्रयो गुणाः ॥

In the references given, Roman figures stand for Acts, the second figures denote pages, while the last figures shew the lines, except when preceded by the symbol v., which indicates the numbers of verses.

they will have to be included under "Upamās" from the psychological point of view.

I have restricted my effort to an examination of comparisons in the *Śākuntala*[2] only, firstly because it is the masterpiece of Kālidāsa and secondly, being a piece of dramatic art, it is a truer reflection of human life than what we find in his 'Kāvyas.'

There are about 180 comparisons in the whole of the work under examination. Though Act I and VI are almost equal in extent, the former is quite barren in comparisons containing about 8, while the latter quite bristles with them, containing about 51. The reason for this deficiency is quite plain, for, Act I is almost an introduction to the whole of the work and the poet is more engaged in narration than in the "criticism of life" proper, which is the main work of a dramatist in a play. In Act VI the poet is able to maintain certain detachment of mind so indispensably necessary for the psychological analysis of character and its detailed representation. Acts II, III, IV and V contain 13, 17, 27 and 29 respectively. Here we find a gradual increase till it culminates in Act VI, which, as I have said above, contains 51. From Act VI onward there is no increase but a definite decrease, Act VII containing only 34. The winding up of the drama begins and ends in Act VII and hence the decrease. In fact there seem to be two elements playing a tug of war. In the earlier part of the play the narrative element preponderates, sometimes perceptibly and sometimes in disguise while the critical element is quite in the back ground. In Act IV in particular the poet seems to be unable to keep a

[2]The edition used is that by M. R. Kale, Bombay 1913.

completely objective attitude of mind, which alone is capable of producing comparisons. Here pathos reigns supreme and the mind sways with emotion. The qualities of style that we notice are more of emotional than of intellectual character and hence there is a relative decrease of comparisons. It is mainly an outcome of the poet's heart and not of his head.

As the main object of my essay is psychological, I propose to classify the comparisons according to their sources. The sources of similitudes are co-extensive with the world of the poet's knowledge of men and things.

I. *Heavens*—The Sun in his various aspects is largely employed for the purposes of comparison. His boiling heat in the summer season is referred to in III, 73, v. 10. His powerful light makes the moon fade (III, 79, v. 15). The simultaneous rising of the moon and the setting of the Sun illustrate the prosperity and adversity of the world (IV, 94, v. 2). The birth of an illustrious son is like the rising of the Sun, in the eastern quarter (IV, 114, v. 19.) The Sun is pointed to us as an example of dutifulness since he never fails in his duty of giving light to the people (V, 121, v. 4). He is the most effective agency in removing darkness (V, 129, v. 14). In spite of this, however, he is unable to dispel the nocturnal gloom (VI, 182, v. 30). Aruṇa or the morning twilight is said to be his harbinger (VII, 185, v. 4). It is the sun that makes the day-lotuses blossom (V, 141, v. 28).

The Moon's various aspects and peculiarities have been almost conventionalized in Sanskrit poetry as will be clear from the following references :—The light of the autumnal Moon is most inviting (III, 77,1). She fades into insignificance before the blazing light of the

sun (III, 79, v. 15). The rise of the Moon denotes the glowing prosperity of certain individuals in this world (IV, 94, v. 2). She alone is able to drive off the nightly darkness (IV, 182, v. 30). The eclipse of the Moon is referred to in VII, 202, v. 22. The dark spots on the Moon's surface are mentioned in I, 20, v. 18. A lotus fibre is as soft as the Moon's rays (VI, 170, v. 18). Sakuntalā's personal magnetism towards her two female friends is illustrated by the attraction which the Moon exerts on the Viśākhā constellation (III, 74, 11). The Moon's rays though cool in themselves produce a burning effect on love-smitten souls (III, 66, v. 3). The absence of the Moon by day deprives the night-lotuses of all their gladdening beauty (IV, 95, v. 3). It is the Moon that causes the blooming of the night-lotuses (V, 141, v. 28).

References to constellations are very rare in the play. The Viśākhā Constellation is attracted by the moon (III, 74, 11). Rohiṇī, the fourth lunar constellation, is united to her lover, the moon after an eclipse (VII, 202, v. 22). As regards the eclipses of heavenly bodies, only the eclipse of the moon has been referred to in VII, 202, v. 22. The surface of the heaven has been mentioned in VII, 186, 7. The intermediate space between heaven and earth as the region for birds to move in is mentioned in V, 138, v. 22.

II. *Earth*—The following phenomena of the sky have been made use of for the purposes of comparison :—

Lightning is probably referred to as a tremulously radiant flash having an unearthly origin (I, 31, v. 23). The morning twilight is able to dispel darkness only on account of its share in the sun's light(VII, 185, v. 4).

The unceasing blowing of the wind is a symbol of dutifulness (V, 121, v. 4). Mountains stand unshaken in a storm (VI, 160, 12-13). The wind dries up the succulent leaves of tender creepers (III, 72, v. 8). Evening clouds forming a bar on western horizon look like a mountain range as it were (VII, 190, 1). The tawny-coloured demons appear like so many evening clouds (III, 88, v. 25). Modest people are like clouds surcharged with rainwater, which are bent low to the earth's surface (V, 127, v. 12). Duṣyanta's assurance of help to his subjects was hailed like timely rain (VI, 176, 14). The Ocean's invariable and direct connection with a big river illustrates the natural and worthy longings of Śakuntalā's heart for the illustrious descendant of the Purus (III, 74, 7). As enveloping the earth, the ocean is said to be her garment (III, 81, v. 18).

A river with its torrent divided by a hillock happily illustrates the divided mind of the king (II, 62, v. 17). Big rivers are extremely attached to the ocean (III,74, 7). A river torrent pulls down trees situated on the banks (V, 134, v. 21 and VI, 162, v. 10). The contrast of the mirage and a full-flowing river is made use of in (VI, 168, v. 16). Disappointment is compared to mirage (VII, 199,15). Reeds growing in the river are bent down by the sweep of flowing waters (II, 45,5). The idea of bathing in a lake is implied in VII, 192,1 and that of a river overflowing its banks in V, 119,1, where a song is said to be overflowing with emotion. The description of eyes full of tears indicative of excessive joy has also the same idea underlying it (IV, 103,8). Water cannot flow from a lower to a higher level. This physical law illustrates the fixing of Duṣyanta's love on Śakuntalā (III, 65, footnote 1). Water is discarded by the Haṁsa birds when the same,

mixed with milk is offered to them (VI, 181, v. 28). The killing effect of hot water on tender creepers is spoken of in IV, 94, 3.

The sublime strength of the mountains is described only in one comparison. They remain unshaken and immovable in spite of the abnormal fury of stormy winds (VI, 160, 12-13). The ups and downs of the earth's surface are implied in VI, 166, 7, where a picture in relief is described.

A well concealed by grass resembles a man putting on a cloak of virtue (V, 138,4). The surface of the earth is incapable of producing lightning (I, 31, v. 23). A dull intellect is compared to a lump of earth (VI, 160,5). The burden of the earth is borne by the Serpent God Śeṣa (V, 121,4). The earth is said to be the co-wife of the ruling king (III, 81, v. 18).

Comparisons from the mineral world are very few but many of them are quite original : A bright gem though it resembles fire in brilliancy is capable of being touched by human hands (I, 34, v. 25). A crystal lens (Sūryakānta) emits burning heat when acted upon by the sun's rays (II, 50, v. 7). Boring of gems is referred to in II,54, v. 10. Gems attain exceptional brilliancy even though reduced in size by a polishing instrument (VI, 156, v. 6). A woman's beauty is compared to that of a gem (II, 53, v. 9, line 1).

III. (1)—the Plant Life— Comparisons from the Plant Life are quite numerous.

Garden creepers and forest creepers are contrasted in I, 18, v. 16. A thick eye-brow is compared to a creeper (III, 77, v. 13). A slender and supple woman imitates a creeper (VII, 158, 19). Creepers blossom in the vernal season (VII, 205, 8). A creeper in flowers is delighted to a have bee as a welcome guest (VI, 171, 10).

Creepers shed tears at the time of Śakuntalā's departure from the penance-grove (IV, 107, v. 12). A coil of creepers has grown round the neck of a sage in meditation (III, 191, 1). Comparisons are also drawn from particular plants and creepers. The aspects generally touched upon are tenderness and beauty. Śamī creeper is very tough to cut (1, 19, v. 17). Śamī stick holds in itself the capability of producing fire (IV, 98, v. 4). *Mādhavī* creeper is dried up by the action of the wind (III, 72, v. 28) The *Atimuktalatā* is encumbered with foliage and entwines a mango tree (III, 74, 8). The tenderness of *Navamālikā* flower is quite proverbial in Śākuntala (I, 19, 2). The sun's rays produce a blighting effect on a *Navamālikā* flower (II, 52, v. 8). What man can have the heart to pour hot water on a *Navamālikā* creeper ? (IV, 94, 3). The *Vanajyotsnā* creeper in blossom is mentioned in I, 23, 3. She is also said to be the sister of Śakuntalā (IV, 107, 11). Particular flowers are also made use of for comparisons. A *Kunda* flower, filled with dew at dawn tempts a bee, but he is prevented from enjoying it on account of the cold dew (V, 133, v. 19). The tenderness of a *blue lotus* and the toughness of a Śamī creeper are contrasted (1, 19, v. 17). A lotus, though intertwined with moss, is charming (I, 20, v. 18). Lotus leaves are used as fans (III, 82, v. 19). Dust on a road resembles the soft pollen of lotuses (IV, 106, 11). A lotus is the habitual dwelling of a bee (V, 118, v. 1). A beautiful forearm looks like a red lotus stalk (VI, 170, 13). The tender hand of a child resembles a lotus opened at early dawn. (VII, 195, v. 16), The sun produces an injurious effect on the night-lotuses (III, 79, v. 15). In the absence of the moon a lake full of night-lotuses is really a distressing sight (IV, 95, v. 3). In his presence they

blossom forth (V, 141, v. 28). Day-lotuses blossom only in the presence of the sun (V, 141, v. 28).

Youth is as inviting as a flower (I, 22, v. 19). Unenjoyed beauty is like an unsmelt fragrant flower (II, 54, v. 10). A bee sucks honey from a fresh flower (III, 84, v. 22). He is a thief stealing away honey from flowers (VI, 171, 2). Vernal blossom indicates the union of creepers with the vernal season (VII, 205, 8). Appearance of flowers is an indication of youth (I, 23, 3). Lips are as red as the red foliage of trees (I, 22, v. 19). The lower lip of a maiden looks as beautiful as the tender foliage of trees, untouched by hand (VI, 172, v. 20) The innocent beauty of a maiden is like the tender foliage of trees untouched by hand (II, 54, v. 10). The colour of the palms of the hands emulates that of the young shoots of trees (IV, 101, v. 5). Red foliage is contrasted with the pale dried white leaves of trees (V, 128, v. 13). A vigorous young man with a promising career is compared to a vigorous off-shoot of a tree (VII, 197, v. 19). Leaves of trees set in motion by the wind are as it were their fingers calling the beholder to come near them (I, 21, 1).

Branches of trees are their arms with which they embrace Śakuntalā (IV, 107, 15). Trees, bent with the burden of abundant fruit, illustrate the modesty of obliging persons (V, 127, v. 12). A Yogin practising spiritual contemplation is as motionless as the trunk of a tree (VII, 191, 11). Roots of trees are the dwelling place of ascetics (VII, 198, v. 20).

Trees are the friends of Śakuntalā (V, 105, v. 10). They bear the excessive heat of the sun and give shelter to people under their shade (V, 124, v. 7).

To come now to particular trees and plants. The *Sahakāra* or mango tree alone can bear the burden of

the Atimuktalatā (III, 74,7-8). He is the lover of the Vanajyotsnā creeper (I, 23,4), and also of the Navamālikā (IV, 108, v. 13). Mango blossom is no more remembered by a bee when it has secured a happy dwelling in a lotus (V, 118, v. 1). It is the very life of the vernal season (IV, 151, v. 2). It produces intoxicating effect on bees (VI, 151. 6). *Reeds* are swept down by the torrentuous onflow of river waters (II,45,5). *Sugar-cane* is mentioned in VI, 179,16. A *Candana* tree, though it makes happy all creatures resorting to it, is itself defiled by the presence of a young black cobra inside (VII,196,v. 18). A *kesara* tree looks as if entwined by a creeper when Śakuntalā takes her seat at its root (I,21,6). Demons are compared to *thorns* (VII, 185,v. 3.)

Comparisons from *Agriculture* are very scanty: Seed sown at the right time produces abundant crop (VI,177,v. 24).

(2) *Animal Life*—Animal Life brings with it all the affections of the animal body. These also are made use of in comparisons : Duṣyanta is said to suffer from a disease viz. Śakuntalā (VI, 157,8) and his case is wellnigh hopeless. A pimple growing upon a boil is referred to in II,41,10. The overpowering hunger of the Vidūṣaka devours him (VI, 165, 11).

Particular beasts are made use of in comparisons to illustrate some quality found in them prominently in common with other objects :—The deer is a commonplace standard of comparison in Sanskrit poetry. Śakuntalā's eyes are like those of a female deer (I,33, v. 24) and also of a male deer (VI,157,v. 7). The sweet glances of a deer resembling those of Śakuntalā desist the king from killing him (II,46, v. 3). A deer is said to be the adopted son of Śakuntalā (IV,109, v. 14). The king on account of his deep love for hunting resembles

a wild elephant roaming on mountains (II, 47, v. 4). The king taking rest after the duties of the day looks like an elephent-lord retiring to a cool place after having conducted the herds to their pastures (V, 122, v. 5). Mātali giving a severe thrash to the Vidūṣaka compares himself to a tiger pouncing upon a struggling prey (VI, 180, v. 27). A mouse seized by a cat is hopeless of life (VI, 180, 8).

A serpent expands its hood when offended (VI, 182, v. 31). A black serpent defiles a *Candana* tree by its presence (VII, 196, v. 18).

A mass of dust settling down on the trees in the penance grove looks like a swarm of locusts (I, 38, v. 29). A cuckoo feels an intoxicating joy at the sight of mango blossom (VI, 151, 8). The sweet notes of the cuckoo issuing from trees are supposed to be their permission to Śakuntalā at the time of her departure to her husband's house (IV, 105, v. 10). The cuckoos are supposed to be reared up in the nests of crows (V, 138, v. 22). The female *Cakravāka* bird is referred to in III, 85, 3). Her cry indicates her pangs of separation from her mate (IV, 110, 13). A bee sucks honey from a fresh flower in a very careful and kind manner (III, 84, v. 22). It is also said to have resorted to a lotus after having kissed the mango blossom (V, 118, v. 8). It cannot enjoy a Kunda flower filled with morning dew (V, 133, v. 19). It is a welcome guest to a creeper in flowers (VI, 171, 10) A female bee does not drink honey without her lover out of excessive love for him (VI, 171, v. 19). Absence of flies in a place implies complete seclusion (II, 51, 5 ; VI, 158, 5).

IV. *Domestic Life*—Comparisons from this department of knowledge are very varied and homely :—

A man who has lost his relish for *dates* may have

a desire for *tamarind* (II, 53, 1). *Fresh honey* is referred to in II, 54, v. 10. Sensual women are *honey*-tongued (V, 137, 13). The king is also said to be *honey*-tongued (V. 139,2). *Sugar-cane* is mentioned in VI, 179,16. A spark of fire on a pile of cotton works havoc (I,13, v. 10). Fire, when stirred, burns with a glowing flame. (VII, 182, v. 31). No other agency than fire can consume things (IV, 91,19). A man experiences darkness even though a lamp be near, if a screen covers the same. (IV, 178,18-19). Water can not flow from a lower to a higher level : just in the same way the heart of the king cannot turn back from Śakuntalā (III, 65, foot note 1). The administration of government is compared to a parasol with its staff held in hand (V, 123, v. 6). A mirror covered with dust does not reflect a clear image but the same wiped clean gives a well-defined image very easily (VII, 210, v. 32). Indra's thunderbolt was as good as an ornament since it proved ineffectual in his war with demons (VII, 206, v. 26). A silken flag keeps fluttering backwards though its staff is carried forward : just of such a nature was the state of the king's mind when returning to the capital after his first love (I, 40, v. 31). Penance is the wealth of ascetics (IV, 91, v. 1). Restraint of body and mind is a treasure in itself (IV, 111, v. 17). A daughter is a deposit of money (IV, 117, v. 22). The same relation exists between Śāradvata and the pleasure-loving souls of the city as is to be seen between one who has bathed and one annointed, between a pure man and an impure one, between one who is wide awake and one sleeping and finally between one who is fettered and one who is quite free (V, 126, v. 11).

Family relations are also made use of in comparisons. As the drama presents to us on a miniature

scale an idealized picture of ancient Indian life in all its varieties, it is but natural that a prominent place should be given to these relations :—A wife's natural influence over her husband is referred to in VII, 210, v. 32. A mango tree is the husband of Navamālikā creeper (IV, 108, v. 13). The earth is the co-wife of a ruling sovereign (IV, 115, v. 20). A male bee and a female bee are mentioned in VI, 172, v. 20. Comparisons illustrating *parental affection* are the following :—Animals are to be looked upon as children (VII, 194, 4). A certain deer was the adopted son of Śakuntalā (IV, 109, v. 14). A king protects his subjects as his own children (V, 122, v. 5). Comparisons illustrating *fraternal* relations are also noteworthy. The king's subjects are said to be his brethren (V, 124, v. 7 and VI, 176, v. 23).

V. *Social Life.*—In ancient India hospitality to guests was regarded as almost a virtue. The hospitable treatment given by Indra to Duṣyanta is spoken of in glowing terms in VII, 184, 3. The bee is a welcome guest to creepers in flowers (VI, 171, v. 19). The polite manner of addressing persons is referred to in V, 119, 12. Friendship hastily formed without sufficient knowledge of each other's hearts is sure to turn into enmity (V, 139, v. 24). Good persons always look upon their friends with favour (VI, 187, v. 29). An ideal act of favour is compared to taking a man from the stake and mounting him on an elephant (VI, 148, v. 21).

As opposed to friendship villainy is the subject of certain comparisons :–The king is compared to a sweet-tongued villain (V, 139, 2). He is also compared to a thief (V, 134, v. 20). The bee is said to be a thief stealing honey from flowers V. 126, v. 10. A city

thronged wlth people is compared to a house on fire surrounded by large crowds (V, 126, v. 10).

The idea of imprisoning is implied in VI, 172, v. 20, where the king becomes jealous of the bee represented in the picture as hovering round the face of Śakuntalā and wishes to close him up in a lotus. The delight felt by some persons when they practise mischief knowingly is illustrated by a parallel from daily life viz. paining the eyes of a man so as to cause a flow of tears and then to ask him the cause of it (II, 45, 1). Comparisons relating to military life, hunting and other sports are also to be found :—The Sūtradhāra is carried away by the enchanting melody of his lady like Duṣyanta in pursuit of a swift-footed deer (I, 9, v. 5). Again in I, 10, v. 6 Duṣyanta in his turn is compared to God Śiva chasing a deer.

The apparently virtuous conduct of a hypocrite is compared to an armour (V, 138, 4). The torments of a repenting heart are like those produced by a poisoned arrow-head shot in the heart (VI, 160, v. 9). The relief felt when such an arrow-head is taken out is described in VII, 204, 9. The twanging sound of the bow is likened to the terrific growl of a wild beast (III, 64, v. 1).

The earth is imagined to be a big ball thrown high aloft in the air (VII, 189, v. 8).

VI. Religious Life.—Śakuntalā is congratulated by her female companions upon her getting a worthy husband by coincidence like the oblation of a sacrificing priest, which falls direct into the sacrificial fire even though his sight is obscured by smoke. She is also compared to knowledge delivered over to a good student in as much as such knowledge need not at all be deplored (VI 97, 19–20). The Vidūṣaka, describing

how he was roughly handled by Mātali, compares himself to a sacrificial victim gradually done to death (VI, 182, 1).

The following comparisons illustrate the two religious doctrines of Karman and Mokṣa :—

The fruit of various acts done in former births comes to maturity (II, 54, v. 10). There is no possibility of a sage getting Mokṣa if he is seduced by the Apsarases (V, 119, 8-9.)

VII. *Mythology and other literature.*—Comparisons drawn from this source of knowledge show that Kālidāsa's knowledge of ancient works embodying myths and legends was quite sound.

The idea of God Śiva pursuing a deer is taken from the Purāṇas[3] (I, 10, v. 6). The goddess Lakṣmī as the one and only standard of beauty, appears to have been equalled if not surpassed by Śakuntalā[4] (II, 53, v. 9). A divided state of mind leading to utter inaction is well illustrated by alluding to Triśanku suspended midway between heaven and earth.[5] (II, 61, 21). Reference to the Viśākhā constellation and the digit of the moon (III, 74, 11) seems to have its origin in the astronomical fact that the Viśākhā constellation appears near the moon when the sky is bright and shines brightly viz. during the months of April and May.[6]

Reference to Yayāti and his wife Śarmiṣṭhā in IV, 104, v. 7. is from ancient legendary history.

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3 Monier William's edition, p. 9, foot-note 2.

4 I am inclined to understand the allusion in this way; otherwise, the force of the word अपरा would not be clearly explained.

5 See M. W., p. 91, foot note 3.

6 Cf. Vikramorvaśīya Act I. — चित्रलेखाद्वितीयां प्रियसखीमुर्वशीं गृहीत्वा विशाखासहितो इव भगवान् सोम उपस्थितः राजर्षिः ।

Apsarases or the celestial nymphs as employing seductive artifices against sages with suppressed passions are mentioned in V, 119, 8-9.

The sun with horses yoked to his chariot and the serpent god *Śeṣa* as bearing the burden of the earth are mentioned in V, 121, v. 4. The sun as having seven horses is referred to in VI, 182, v. 30. Aruṇa, the charioteer of the sun is said to destroy darkness by the power acquired from his master (VII, 185, v. 4).

Kālakūṭa, the poison of poisons, illustrates the poisonous influence of the king's harem (VI, 174, v. 21).

Duṣyanta draws an imaginary picture of his ancestors, not getting the requisite oblations for want of a son to offer the same to them. (V1, 177, v. 25).

No distinction exists between Indra and Duṣyanta except this that while Indra's chariot moves on the earth without touching the ground, that of Duṣyanta touches it (VII, 191, v. 1).

Duṣyanta thinks himself to be as it were in a deep lake of Amṛta while at the asylum of Mārīca, so very rich is the atmosphere of the place in spiritual happiness (VII, 192, v. 1).

The mythical interpretation of the lunar eclipses together with the legend regarding the love of Rohiṇī and the moon is made use of in VII, 202, v. 22 to illustrate the separation of Śakuntalā from Duṣyanta and her re-union with him.

In VII, 208, v. 28, Duṣyanta is compared to Indra; his son, Sarvadamana to Indra's son Jayanta and Śakuntalā to Paulomī, the wife of Indra.

As Duṣyanta destroyed a race of demons hostile to Ind,ra he is compared to Nṛsimha, the fourth incarnation of Viṣṇu (VII, 185, v. 3).

VIII. *Fine Arts.*—Allusions to Fine Arts in the works of Kālidāsa go to prove that apart from his being a poet, he had a deep knowledge and a critical appreciation of other arts allied to poetry viz. painting and music.

The variegated audience in a theatre listening with eager attention to the melodious music of the stage is said to be like an assemblage of persons represented in a picture (I, 8, 1-2). How an artist in painting an ideal picture combines all the beautiful forms is well described in II, 53, v. 9, where the king dazzled by Śakuntalā's exceptional beauty indulges in various fanciful theories regarding her origin. Another principle of the pictorial art that the objects represented in a picture must appear forth in full relief is illustrated in VI, 166, 7, where the picture of Śakuntalā painted by the king is described at length. In the description of the same picture it is said that she is represented as slightly exhausted on account of her having watered the plants in the penance-grove (VI, 167, 15).

Comparisons from music are very scanty in the *Śākuntala*, though in other works of Kālidāsa many more will be found. The emotive aspect of music is mplied in V, 119, 1, where the king appreciates the music of his former favourite Haṁsapadikā.

IX. *Mental States.*—Comparisons dealing with the states of mind either in a sound or deranged condition as well as from mental experience of a general nature are also to be found :—

No coherence of speech is to be expected of a mad man (IV, 91, v. 1). The king conversing with his finger-ring in a fit of erotic reverie is compared to a mad man (VI, 165, 5). A blind man mistakes even a

garland thrown on his head for a serpent (VII, 203, v. 24.) Mental illusions whether those experienced during sleep or those produced by a conjurer or those resulting from a want of mental concentration are referred to in VI, 162, v. 10.

The extreme velocity of Indra's chariot descending precipitately towards the earth produces a sort of illusion that the earth itself is descending from the summits of mountains emerging suddenly into view (VII, 189, v. 8). The transition from the false knowledge of a thing to the true knowledge of the same by means of inference based on reliable evidence is described in VII, 209, v. 31. From VI, 173, v. 31, we know how our own absorbing interest in certain things can make dead things alive.

X. *Abstract World*—The chief purpose in introducing comparisons in any composition is to illustrate abstract notions by means of concrete instances. But in Kālidāsa as in some English poets like Shelley and others, we notice a reversion of the usual process. At times a personified abstraction becomes the standard of comparison. The following are the instances of abstract comparisons :—

An elephant, terrified at the sight of the king's chariot, enters the sacred grove of Kaṇva, appearing as if he were a corporeal interruption to his penance (I, 38, v. 30). In VII, 193, v. 13, Śakuntalā, who was in fact the object of the king's desire, is identified with the desire itself. The happy union of Duṣyanta, Śākuntalā and their son is compared to an accidental combination of Faith, Fortune and Action (VII, 208, v. 29). The faultless beauty of Śakuntalā is compared to a full reward of meritorious deeds (II, 54, v. 10). The king in a repenting mood, recounting his first happy love-

making with Śakuntalā compares it to merit worn out with that much of scanty reward (VI, 162, v, 10). Other instances of personifications are commonly met with :—Disasters crowd at loop holes (VI, 158, 9). Fate is indeed all-prevailing (VI, 160, 5). The ambition of the magnanimous is indeed high-soaring (VII, 192, 13). Duṣyanta's fame is established on the surface of heaven (VII, 186, 7). Hunger has almost eaten up Vidūṣaka (VI, 165, 11).

XI. *Conventions, poetic and otherwise*—It is a fact, patent to all lovers of Sanskrit literature, that many of the ideas which were originally full of fire and fancy in spite of their exaggeration, became in the hands of later poets quite petrified and conventional. It is no wonder, therefore, if we find in Kālidāsa side by side with pure gold some dregs of the baser metals in spite of all his alchemy of imagination.

The cool rays of the moon pour down fire on a love-smitten person (III, 16, v. 3). There seems to have been a set description of love-struck persons given in some ancient works since it is remarked by Anasūya that the above-named description is applicable to her friend Śakuntalā (III, 70, v. 14). The comparison of an eye-brow with a creeper is quite hackneyed (III, 77, v. 13). The influence of the moon on the night-lotuses, which is referred to in almost all the Sanskrit Kāvyas, is a tiresome source of comparisons (III, 79, v. 15) ; (IV, 95, v. 3). The earth is looked upon as a co-wife of a sovereign (III, 81, v. 18). The separation of the male and female Cakravāka birds is quite proverbial (III, 85, 3). The Malaya mountain as the natural home of Candana trees is referred to in IV, 113, 12. The young ones of the cuckoos are brought up in the nests of crows (V, 138, v. 22). It is for the naturalists

to test the truth of this convention. The representation of Cupid as armed with bow and arrow is the same in English and Sanskrit poetry (V, 138, v. 23 ; VI, 153, v. 4). Mango-blossom is the sixth arrow of the God of Love (VI, 152, v. 3 ; VI, 158, v. 8).

The intoxication felt by bees at the sight of mango-blossom, though natural, has become almost a passport to the attainment of poetic dignity (VI, 151, 8).

The peculiar virtue of Haṁsa birds to suck up milk only and discard water when a mixture of both is offered is a time-worn convention (VI. 181, v. 8.)

Some general conclusions—From the foregoing conspectus of ideas it will be abundantly clear that Kālidāsa's susceptibility to the uncommon aspects of common things was exceptionally keen. Even from the results of analysis at my disposal, I am happy to note that *his intellect was truly comprehensive* and it appropriated every thing that stood within its range. His *knowledge of nature* was quite first-hand. Duṣyanta's first love has gained a permanent footing. He says :—

न च निम्नादिव सलिलं निवर्तते मे ततो हृदयम्

" It is as impossible for his heart to leave the object of his love as for water in a low place to flow to a higher one." (III, 65, foot-note 1.)[7]

To take another instance. No comparison depicts more skill in word-painting than what is contained in the description of dust, first raised by the hoofs of horses and then settling down on the trees of Kaṇva's penance-grove. The mass of dust is compared to a

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7 Though this stanza is given in the foot-note in the edition I have used for reference, I am inclined to ascribe it to Kālidāsa on account of its simplicity and beauty.

swarm of locusts :

शलभसमूह इव रेणुः.........पतति

Does not this comparison bespeak Kālidāsa's freshness of outlook on nature? Has he not the rare *power of visualizing things by means of slight suggestions*, which Tennyson or Browning among others depict in abundance?

Another noteworthy point with regard to his knowledge of nature is that *he drew no line of demarcation between nature and man.* Relations of men in society are illustrated by those between plant and plant. In particular we find in the *Śākuntala* that all differences between the plant life and the animal life are completely obliterated and life as a whole is presented to us.

A very exalted type of imagination is required to describe in detail the whole aerial experience of Duṣyanta. How for instance the earth appears to have been tossed up towards Duṣyanta in his downward flight is sublimely described in VII, 189, v. 8. There were no aeroplanes in Kālidāsa's time and still wonderfully enough the whole description tallies *mutatis mutandis* with that given by Mr. H. G. Wells[8] in one of his articles, where he informs us of his first aerial experience.

Then again I have to emphasize that every comparison can never be a sign of genius. Comparisons like every thing else in this world have their own aesthetics. In the first place they must be apt. When a pedant on seeing a high tower remarked : "What a phrase of building!" he really proved his incapacity to be either a child or a poet.

8 "How an Englishman looks at the world", passim.

That Kālidāsa's comparisons show this *aptness* without fail can be shown by referring to a few instances. Priyaṁvadā congratulating her friend Śakuntalā upon getting a suitable husband says :—

दिष्टया धूमाकुलितदृष्टेरपि यजमानस्य पावक एवाहुतिः पतिता ।
वत्से सुशिष्यपरिदत्ता विद्येवाशोचनीयासि संवृत्ता ।

(IV, 69, 19-20).

The aptness and the beauty of the comparisons consist in the poet's power to illustrate a worldly relation by means of an instance from religious life.

On the other hand in the hands of the Vidūṣaka every thing serious and sacred becomes vulgar and comic. When thrashed out severely by Mātalī he says :—इष्टिपशुमारं मारितः । (IV, 182, 1). Elsewhere speaking of Duṣyanta gone mad with love, he says :— लङ्घित एष भूयोऽपि शकुन्तलाव्याधिना etc., (VI, 157, 8). Bergson's theory of laughter is fully illustrated in the development of the Vidūṣaka's character, for, while speaking of the soul he always refers to the body and all its vulgar affections.[9]

Other qualities of comparisons such as novelty, variety etc. need no particular illustration as they are apparent from the classification of the sources of comparisons furnished above.

The student of English literature will be surprised not to find in Kālidāsa those 'long-tailed' comparisons which he finds in abundance in Milton or in Homer. The deliberate hammering out of a single idea, howsoever skilfully managed, produces on us an impression of artificiality, which is in no way helpful to work of creative art, for, artifice can never stand on par with creative art. Kālidāsa's comparisons are almost all of them direct and they appeal to an Indian

9 Laughter by H. Bergson, p. 53.

mind as they depict Indian civilization nurtured in the forest and not within the city walls as in the case of Greeks and Romans. There is, therefore, noticeable in all of them a freedom of spirit resulting from every-day contact with the vital force in Nature.

PHILOSOPHY

INDIAN AESTHETICS.

BY

M. HIRIYANNA.

It has become somewhat of a commonplace in these days to speak of the ancient Hindus as having achieved distinction in Philosophy. But the word 'philosophy' is so loosely used and the phases of philosophic investigation are so many and so varied in character that such an opinion, standing by itself, cannot be taken to indicate anything beyond a certain aptitude of the Hindu mind for abstract speculation. A signal illustration of the indefiniteness of this opinion is furnished by Max Müller, the very scholar that was largely responsible for giving currency to the view that the ancient Hindus were highly gifted philosophically; for while he at one time described them as 'a nation of philosophers', yet, at another time, gave out as his considered opinion that 'the idea of the beautiful in Nature did not exist in the Hindu mind.'[1] The fact is that a vague and general statement like the above is of little practical value unless it is supported by evidence of progress made in the various departments of philosophic study, such as Logic, Psychology and Metaphysics. Here is a vast field for the student of Indian antiquities to labour in and the harvest, if well garnered, will be of advantage not only for the history of Indian thought but also, it may be hoped, for Universal Philosophy. The object of the present Paper is to indicate, however slightly it may be, the nature of the advance made by the Indians in one bye-path of philosophy, viz., aesthetics or the

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[1] See 'The Philosophy of the Beautiful' by William Knight, Part I, p. 17.

inquiry into the character of Beauty in Nature as well as in Art.

2. The most noticeable feature of Indian philosophy is the stress which it lays upon the influence which knowledge ought to have on life. None of the systems that developed in the course of centuries in India stopped short at the discovery of truth; but each followed it up by an inquiry as to how the discovered truth could be best applied to the practical problems of life. The ultimate goal of philosophic quest was not knowledge (*tattva-jñāna*) so much as the achievement of true freedom (*mokṣa*). Indian philosophy was thus more than a way of thought; it was a way of life; and whoever entered upon its study was expected to aim at more than an intellectual assimilation of its truths and try to bring his every-day life into conformity with them. Consistently with this pragmatic aim, ethics occupies a very important place in Indian philosophy. Like ethics, aesthetics is dependent upon philosophy and like ethics, it aims chiefly at influencing life. When such is the kinship between ethics and aesthetics, is it probable that a people who devoted so much attention to one of them, altogether neglected the other? Is it conceivable that they who showed special power in the grasp of the good did not even stumble upon the kindred conception of the beautiful? We are not however left to such vague surmises; for, not infrequently we find in Sanskrit philosophical works[2] parallels drawn from art which imply that the close relation of the beautiful to the good and the true was not all unknown to ancient India. We have even more direct evidence in the

2 Compare e. g. *Sāṁkhya-Kārikā*, sl. 65; *Sāṁkhya-Tattva-kaumudī* on sl. 42, 59; and *Pañcadaśī* of *Vidyāraṇya*, ch. X.

numerous works in Sanskrit on Poetics which, though their set purpose is only to elucidate the principles exemplified in Poetry and the Drama, yet furnish adequate data for constructing a theory of fine art in general. A consideration of the teachings of these works shows us that Indian aesthetics had its own history ; and the process of its evolution as may well be expected, followed closely that of general philosophy.

3. It is well-known that the earliest philosophy of India consisted in the explanation of the universe by means of a number of supernatural powers called 'devas', 'the shining ones', or 'gods'. This pluralistic explanation however soon appeared inadequate to the growing philosophic consciousness of the Indian ; and a quest began thereafter whose aim was to discover the unity underlying the diversity of the world. The history of this quest is very long and can be traced from the *Mantras*, through the *Brāhmaṇas*, down to the period of the *Upaniṣads*. Various principles were in turn regarded as representing this ultimate reality some concrete, others abstract—and although each solution was in turn given up as unsatisfactory, the search itself was not abandoned until an abiding conclusion was reached in what is known as 'the *ātman* doctrine' of the *Upaniṣads*. The central point of this doctrine is that whatever is, is one ; and that its essence is manifested more clearly in the inner self of man than in the outer world. This doctrine brought about a total revolution in the point of view from which speculation had proceeded till then ; for the ultimate reality was no longer regarded as something external but as fundamentally identical with man's own self. The enunciation of the absolute kinship of Nature with Man marks the most important advance

in the whole history of Indian thought. I am not, however, for the moment, concerned with this philosophic solution in general, reached in the Upaniṣadic period. I am interested only in emphasising one aspect of it, viz., that what we commonly regard as real is not in itself the ultimate reality but only a semblance of it. The world of sense, equally with the world of thought, is but an appearance of the ultimate Truth—an imperfect expression of it but yet adequate, if rightly approached, to point to the underlying unity. Neither our senses nor our mind can grasp this unity, but so much of it as they can grasp is sufficient to find out its true meaning and realise it within ourselves.

4. There is a second aspect of Indian philosphy to which it is necessary to draw attention before speaking of Indian art. The earliest philosophy of India had a supernatural basis. Although the objects of early Aryan worship were in reality only powers of Nature, there were supposed to be working behind them supernatural beings. So long as this belief continued, the ambition of the Indian in this life was to secure the favour of those beings with a view to attain companionship with them hereafter. This eschatological view changed with the change of belief in the gods, but yet for long afterwards there lingered the view that the highest good that man could attain was attainable only after death. With an ideal like this, man naturally looked upon the present life as merely a passage to another and a better one. He lived mainly for the coming world, disregarding, if not altogether discarding, the realities of this life. Asceticism was the natural outcome of it. In course of time this ideal of practical life also underwent a change, not less important than the change on the speculative side to which I

have already referred and it came to be believed that the highest ideal that man could attain was attainable on this side of death, here and now. The full development of this view belongs to the period that followed the composition of the classical Upaniṣads but its source can be traced earlier in those Upaniṣadic passages which refer to *Jīvanmuktī*[3]. *Jīvanmuktī*, to speak from the purely philosophic standpoint, marks the highest conception of freedom. It is one of the points where Indian philosophy emerges clearly from Indian religion; for, the goal of existence according to this conception is not the attainment of a hypothetical bliss *hereafter* but the finding of true freedom on this bank and shoal of time. It is difficult to exaggerate the importance of this change. It transformed the whole outlook of the Indian upon life and remoulded his ethical ideal. The ideal, no doubt, was yet as far as ever from the average man; but what once was more or less a matter of pure speculation had been brought within the possibility of positive experience. The aim of life was no longer conceived as something to be sought for beyond this world, but to be realised *here*, and if one so willed, *now*. The new ideal was the achievement of a life of harmony, not thro' the extinguishment of interests but by an expansion of them—not through repressing natural impulses but by purifying and refining them. It was a mode of living characterised by passionless purity and an equal love for all, such for instance as is described in glowing terms more than once in the Bhagavadgītā[4]. For the realisation

3 The word *jīvanmukta* is not known to the Upaniṣads; but the conception is there all the same. Cf. e.g., Kaṭha. Up. v. i., vi. 14.

4 e.g., v., 23-5.

of this ideal, the training of the feelings was a necessary preliminary and in consequence, the first aim of life came to be looked upon not so much the cultivation of the intellect or the development of the will ; as the culture of the emotions.

5. In these two characteristic features of early Indian philosophy, it seems to me, we have the main influences which moulded the theory of art as it is disclosed to us in Sanskrit works on Poetics. We do not know when this class of works began to appear, Tradition is at one[5] in counting *Bhāmaha* among the earliest writers on Poetics; but in him we see the subject has already assumed a definite shape. His name, along with those of some others like *Udbhaṭa*, *Rudraṭa*, *Daṇḍin* and *Vāmana* is associated with a distinctive canon of poetry. There are indeed differences in matters of detail among these writers. For instance, there is no clear distinction recognised between *guṇas* and *alaṁkāras* by some,[6] while others give the one or the other of these the first place in judging the worth of a poem[7]. It is not necessary to enter into these details here; for all these writers, in spite of minor differences, exhibit cognate ways of thinking. We may therefore regard them as, on the whole, representing the first stage in the growth of poetic criticism. In the writers of this *prācīna* school we find the subject of poetry dealt with under three heads *doṣas*, *guṇas*, and *alaṁkāras*. The last, *alaṁkaras*, may be left out of consideration here; for, in the first place, they are not recognised by all to be essential,

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5 Comp : e.g., first śloka of the *Pratāparudrīya* ; *Alaṁkāra Sarvasva* (Nir : S. Pr.) p. 3.

6 e.g., by Udbhaṭa (see Alaṁkāra-Sarvasva, by Ruyyaka p. 7.)

7 See Vāmana : '*Kāvyalaṁkāra Sūtra*' III, i, 1, 2, and 3.

and in the second, they almost exclusively relate to imaginative literature and have no proper place in any general theory of art. Some of the conditions laid down under the remaining two heads are intended only to secure logical or grammatical requirements such as coherence of thought and correctness of language. Even the others as we shall presently see, rareley allude to the central essence of poetry. Where they do involve a reference to this essence, its importance is misjudged and only a subordinate place is assigned to it.[8] The attention of this school is practically confined to the outward expression of poetry viz., *śabda* (word) and *artha* (sense). Certain forms of these are regarded as *doṣas* and certain others as *guṇas*; and it is held that what confers excellence on Poetry is the absence of the one and the presence of the other.

6. There is another school known as the later or *navīna* school of critics, the theory advanced by whom is far different. As in the case of the earlier school, this also seems to have had more than one branch. We shall here consider the most important of them as represented by the *Dhvanyāloka*. Apparently it is the oldest work of the kind extant; but this very work contains evidence of the fact that the point of view which it adopts in judging poetry had been more or less well-known for a long time before.[9] This work starts by distinguishing between two kinds of meaning—the explicit and the implcit—and attempts to estimate the worth of a poem by reference to the latter rather than to the former.[10] The explicit mean-

8 Vide Alaṁkāra Sarvasva by Ruyyaka, pp. 3—7; Dhvanyāloka pp. 9—10.

9 Vide śloka i, i ; iii, 34, 52, also the final *śloka* of the *Āloka*.

10 Vide Dhvanyāloka i, 3-5.

ing, no less than the words in which it is clothed, constitutes, according to this view, the mere vesture of poetry.[11] They together are its outward embodiment—the necessary conditions under which a poetic mood manifests itself. These external and accidental features alone appealed to the earlier school. But the critic of the new school concentrated his attention on the implicit meaning which forms the real essence of poetry. From this new standpoint things like *doṣas* or *guṇas*, in settling the nature of which there was once so much controversy, are easily explained. It is as though we are now in possession of the right key to the understanding of all poetry. Whatever in sound or sense subserves the poetic end in view is a *guṇa*; whatever does not, is a *doṣa*[12]. *Doṣas* and *guṇas* are relative in character. There is no absolute standard of valuation for them. They are to be judged only in reference to the inner meaning which constitutes the truly poetical. The artist never really feels concerned about them; for, a thought or feelinge xperienced with poetic intensity is sure to find expression. The expression is also likely to be more or less imperfect, but the question is not whether it is perfect, but whether it is adequate to convey the thought or emotion to others. If it is adequate, it is good poetry, otherwise, it is not.

7. The implicit meaning is three-fold and the poet may aim at communicating a fact (*vastu*) or transferring an imaginative (*alaṁkāra*) or an emotional mood (*rasa*). The first is obviously the least poetic and whatever artistic character it may possess is

11 Id. I, 7-12.

12 Cf. Dhvanyāloka, ii, 6,

entirely due to treatment and not to subject. We may, therefore consider here only the remaining two, which have their bases respectively in imagination and feeling. True art is no doubt a compound of feeling and imagination but in any particular case the one or the other may predominate and the two-fold classification should be regarded as having reference to the predominant factor. In this view art represents the almost spontaneous expression of a responsive mind when it comes under the spell of an imaginative or an emotional mood. It was this expression–the outward element of poetry and not its inner springs which the older school of critics analysed[13]. The later school, as we have already seen, occupied itself with what this expression signifies. The expression was important to them only as a means of suggesting or pointing to the implicit significance. Here we find a theory of art which exactly corresponds to the doctrine of *ātman*. Just as the passing things of experience are not in themselves real but only imperfect manifestations of Reality, so word and explicit meaning are but the exterior of poetry and until we penetrate beneath that exterior, we do not reach the poetic ultimate.

8. So far we have considered the essence of poetry as consisting in the imaginative thought or the emotional mood which a poet succeeds in communicating to us. But gradually more stress came to be laid upon the latter than upon the former. Under the influence of the altered ethical ideal to which allusion has been made above art came to be more and more utilised as a means of emotional culture. There was peculiar fitness in its being so used, for it

13 See Dhvanyāloka, iii, 52.

can, not only teach, but also please and while it can successfully persuade, it can keep its persuasive character concealed from view. It was thus that poetry came to be viewed as possessing a double aim—the direct one of giving aestheic delight (*Sadyaḥ-para nirvṛti*) and the indirect one of contributing toward the refinement of character[14]. This particular use to which art was put made *Rasa* more important than either *Vastu* or Alaṁkāra[15]. It is this change in the nature of Sanskrit poetry that is meant when it is stated that *rasa* is the *ātman* of poetry—a statement which by the way shows clearly the dependence of this canon on the *ātman* doctrine of the Upaniṣads. When the predominance of *rasa* came to be insisted upon as indispensable to artistic excellence, many of the systems of philosophy applied their own fundamental principles to its interpretation so that in course of time there came to be more than one theory of *rasa*. I shall devote the rest of the paper to an elucidation of these theories according to two of the chief systems, *viz.*, Vedānta and Sāṁkhya alluding incidentally to the corresponding conceptions of Beauty in Nature :—

9. And first as regards the Vedānta. Among the various approximate terms used in the Upaniṣads to denote *Brahman*, one is *Ānanda*. *Ānanda* means bliss ; and *Brahman* according to the monistic and idealistic teaching of the Upaniṣads, represents the inner harmony of the universe. Brahman is termed *ānanda* because of the restful bliss that results from realising that harmony. *Brahman* is so termed for instance in the Tait. Up. iii. The appropriateness of the term *ānanda* consists just in this suggestion that the harmony of the universe must be realised in one's own

14 Cf. e.g. Kāvyaprakāśa, i, 2.
15 Cf. e.g., Dhvanyaloka. p. 27 (con).

experience and not merely intellectually apprehended; for there can be no such thing as mediated *ānanda*. This word contains the clue to the whole aesthetic theory of the Vedānta. Common experience takes for granted that variety is the ultimate truth. According to the Vedānta, the final truth lies in the unification of this variety through a proper synthesis. But this unification is what takes place in perfect knowledge. Commonly we are occupied with appearances which give only a fragmentary view of Reality. They alone concern us in our every-day life. But he who attains perfect knowledge—the *jīvanmukta*—transcends this fragmentary view. He may continue to perceive variety; but it ceases to have any ultimate significance for him. He merges in the unity which he realises all separate existence including his own and enjoys *ānanda*—the peace that passeth understanding. This higher view-point is not possible for us while we are yet on the empirical plane. We are absorbed in the narrow distinction between the self and the not-self. But sometimes, though rarely, there is a break in this routine and then in the sudden transition from one empirical state to another, we transcend our narrow selves. Our connection with the work-a-day world seems to snap. We do not indeed realise then like the knower, the unity of all that is, but we yet resemble him in one respect, in that we lose sight of ourselves and feel delight, however short-lived, it may be.

10. But among the myriad impressions that reach us from the outer world, what is it that gives rise to such an attitude? This question admits of a variety of answers. It is now symmetry, now novelty, and now something else; and it is this variety that accounts

for the almost bewildering number of theories of the Beautiful that one finds in any history of aesthetics. According to the Vedānta, these do not constitute true Beauty at all but are only its outward and visible symbols. Though diverse in themselves they point to the same underlying harmony which constitutes real Beauty. But, this perfect Beauty which is identical with the ultimate Reality is revealed only to the knower. We perceive only its outward symbols and we may describe them as beautiful, in a secondary sense, since we experience *ānanda* at their sight. Those who identify Beauty with these external factors and seek it as an attribute forget that while these are perceivable by the senses, Beauty is disclosed only to the 'inward eye.' True Beauty is neither expressible in words nor knowable objectively; it can only be realised.

11. Beauty in Nature then, as we commonly understand, is anything that brings about a break in the routine life and serves as a point of departure towards the realisation of delight. This is the only condition which it should satisfy. But what is the significance of this break? Generally we lead a life of continuous tension, bent as we are upon securing aims more or less personal in character. In Śaṁkara's words life is characterised by *avidyā-kāma-karma*, i.e., desite and strife, arising out of the ignorance of the ultimate truth. When we are not actively engaged we may feel this tension relaxed; but that feeling of the relaxation is deceptive for even then self-interest persists as may be within the experience of us all. Delight means the transcending of even this inner strain. The absence of desire then ist he determining condition of pleasure; and its presence, that of pain. The absence of desire

may be due to any cause whatever—to a particular desire having been gratified or to there being, for the time, nothing to desire. The chief thing is that the selfish attitude of the mind–the 'egocentric predicament'–must be transcended at least temporarily, and a point of detachment has to be reached before we can enjoy happiness. Joy or bliss is the intrinsic nature of the self according to the Vedānta, that being the significance of describing the ultimate reality as *ānanda*. The break in the routine life restores this character to the self. If its intrinsic nature is not always manifest, it is because desire veils it. When this veil is stripped off, no matter how, the real nature of *ātman* asserts itself and we feel the happiness which is all our own. In the case of a *Jñanin* the true source of this delight is known; but even when such enlightenment is lacking we may experience similar delight. We may enjoy while yet we do not know. To use Śaṁkara's words again, the ever-recurring series of *kāma* and *karman* or interest and activity constitutes life. The elimination of *Kāma* and *Karman* while their cause *avidyā* continues in a latent form, marks the aesthetic attitude; the dismissal of *avidyā* even in this latent form marks the saintly attitude. Thus the artistic attitude is one of disinterested contemplation but not of true enlightenment while the attitude of the saint is one of true enlightenment and disinterestedness but not necessarily of passivity. The two attitudes thus resemble each other in one important respect, *viz*., unselfishness.

12. And now as regards the Vedantic theory of *Rasa*. The immediate aim of art, as already indicated, being pure delight, the theory of *Rasa* in the Vedānta will be known if we ascertain the conditions that determine a pleasurable attitude of the mind. The

overcoming of desire is the indispensable condition of pleasure. The artist has therefore to induce an attitude of detachment and he can easily do it by means of the ideal creations of his art. Being products of fancy they cannot awaken desire and when attention is once concentrated upon them, the ordinary state of tension caused by selfish desires is relaxed and joy ensues as a matter of course. The various devices of art such as rhythm, symmetry, etc., are intended to help this concentration and successfully maintain it. They also serve another important purpose, *viz.*, securing unity to the subject portrayed. We have seen that the knower who enjoys perfect beatitude realises unity in Nature's diversity. Similarly in artistic perception also, which is followed by pure delight, there is a realisation of unity in variety. But while in the one case what is realised is the truth of Nature, it is in the other, the truth of Art. The latter, no doubt, is a lower truth; but there is yet a close resemblance between the two attitudes; and we may well compare the person appreciating art to a *Jīvanmukta.* He does indeed get a foretaste of *mokṣa* then; but it is not *mokṣa* in fact because it is transient, not being based upon perfect knowledge.

13. To turn to the Sāṁkhya: The essential features of this system are its dualism and its realism It starts with two Absolutes which are altogether disparate—*Prakṛti* and *Puruṣa.* The former splits up on the one hand into the entire psychic apparatus, with *buddhi* as its main factor; and, on the other, into the physical world constituted out of the five elements. The *Puruṣa* or self is awareness, pure and simple. It stands at one extreme while at the other is the objective world. The whole of the mental apparatus is designed

to bring about a mediation between them. How *buddhi*, itself a product of Prakṛti, can serve as a connecting link between them—how a physical stimulus is converted into a psychical experience,—is a question which we need not stop to discuss. Our concern is not primarily with Sāṁkhya psychology or metaphysics but only with its conception of art. It is enough for our purpose if we remember that by such mediation *buddhi* enables the *Puruṣa* to realise either of the two ideals of life—*bhoga* and *apavarga*–that is, to experience pleasure and pain or to attain spiritual aloofness through right knowledge.

14. It is also necessary to make a brief reference here to the theory of the three *guṇas*. The conception of *guṇas* is as difficult to understand as it is essential to the system. Of the large number of effects[16] that can be traced to these *gunas*, *sukha*, *dukkha* and *moha*, which are respectively the result of *sattva, rajas* and *tamas*, are the most important; and it is possible that the Sāṁkhya system is less concerned with the intrinsic nature of things than with their meaning for us. It seems to aim primarily at estimating the value[17] of things as means of pleasure and pain and may therefore be described as a philosophy of valuation. Two applications of the doctrine of *guṇas*, we have to notice in particular here (i) Everything whether it belongs to the outer physical world or to the inner psychic apparatus is made up of these three factors. But some are predominantly *sattvic* others predominantly *rajasic* or *tamasic*. The

16 Vide quotation from *Pañcaśikhā* in *Sāṁkhya-Pravacana-Bhāṣya*, i, 127.

17 Since no value has any meaning apart from consciousness, we probably have here an explanation for the persistent effort of certain Orientalists to describe the Sāṁkhya philosophy as idealistic.

buddhi is intrinsically *sattvic* in this sense.[18] We must, however, remember that each individual *buddhi* has in it, from the beginning, *vāsanas* or acquired impulses which may modify its intrinsic *sattvic* character and transform it into a predominantly *rajasic* or *tamasic* entity. (ii) The feeling of pain or pleasure which we experience arises from the inter-action of the two spheres of *prakṛtic* development—the *buddhi* on the one hand and the objective world on the other, the Puruṣa standing by, only as an onlooker. Though the *buddhi* owing to its intrinsic *sattvic* character should give rise only to pleasure, the play of its acquired inpulses coupled with the character of the particular physical object acting upon it may reverse this result. The same thing may therefore affect different persons differently. That causes pleasure to one may cause pain to another, and what one regards as beautiful, another may regard as ugly ; everything that is perceived comes to be viewed through the distracting medium of individual purpose, and we ordinarily live in a secondary world, ignoring the intrinsic nature of things and setting a conventional value upon them according to our individual bias.

15. Now according to the Sāṁkhya, the basic cause of this predicament is to be traced to a mistaken identification of the *buddhi* with the *Puruṣa*. The mistake cannot be avoided until the *Puruṣa* dissociates himself from *buddhi* altogether, but, according to the Sāṁkhya, the question of neither pleasure nor pain arises then. So far as the ordinary empirical state is concerned,

18 What is meant is that *buddhi* when purged of all its egoistic impulses, as in the case of a *jīvanmukta*, is *sattvic*. Compare *Tattvakaumudī* on st. 65 ; *Maṇiprabhā* on Yoga-sūtras I, 49. and *Sāṁkhya-pravacana-bhāṣya* ii, 15.

individual purpose or selfish desire is ineradicable and life becomes a condition of pain mixed with uncertain pleasure. What is pleasant to one may be unpleasant to another ; or even to the same person at a different time. He on the other hand who acquires true knowledge and realises the intrinsic disparateness of *Prakṛti* and *Puruṣa* transcends the sphere of pain as well as of pleasure. Such a man is a Jīvanmukta. He sees things not as related to him but as related among themselves, that is, as they are absolutely. Everything impresses him in the same way and nothing excites his love or hatred so that he is able to maintain complete composure of mind, and be, as Vijñāna-Bhikṣu says, serene like a mountain-tarn.[19]

16. But such absolute detachment is beyond the reach of ordinary man ; for he cannot transcend his *buddhi*. He cannot therefore grow impersonal even for a while. But we should not therefore consider that the average man cannot escape from pain at all : for although he cannot transcend his *buddhi*, he can, by resorting to art, find a temporary release from the natural world, the second of the two factors contributing to the misery of ordinary existence, Pleasure untainted by sorrow does not exist in the real world and has therefore to be sought outside it. The world of art is no doubt like nature, but being idealised it does not evoke our egoistic impulses. There we have a distinct class of things altogether. which are not made up of the three *guṇas*. They cannot, give rise to either pleasure or pain. The mind is thus enabled to assume a well-poised attitude of which the automatic result is a feeling of pleasure. The artist's function is thus to restore equanimity to

19 Sāṁkhya-sāra vii, 16.

the mind by leading us away from the common world and offering us another in exchange.

17. I have stated that in not a few systems of philosophy, there was a deliberate application of fundamental principles to the interpretation of *Rasa*. The distinctive doctrines of more than one system are found mentioned in Sanskrit works on Poetics.[20] As an illustration of them, I shall take up the theory of *Rasa* associated with the name of *Bhaṭṭanāyaka* and show how it is identical with the Sāṁkhya theory as briefly sketched above.[21] *Bhaṭṭanāyaka* was a reputed *alaṁkārika* and wrote a work known as *Hṛdaya-darpaṇa* which, I believe, has not been discovered yet. But references to it are plentiful in *alaṁkāra* works, especially in *Abhinavagupta's* commentary on the Dhvanyāloka. *Bhaṭṭanāyaka* does not seem to have been much older than *Abhinavagupta* himself. The following is a *resume* of the theory as given in the *Kāvyaprakāśa* :—

न ताटस्थ्येन नात्मगतत्वेन रसः प्रतीयते नोत्पद्यते नाभिव्यज्यते अपि तु काव्ये नाट्ये चाभिधातो द्वितीयेन विभावादिसाधारणीकरणात्मना भावकत्वव्यापारेण भाव्यमानः स्थायी सत्त्वोद्रेकप्रकाशानन्दमयसंविद्विश्रान्तिसतत्त्वेन भोगेन भुज्यते ॥ (iv)

18. If we leave out the references to the other views from which the present theory differs, there are three points worthy of note here :—

(i) The first refers to the nature of the objects contemplated in art. They have no reference to anybody in particular. In life everything is consciously or unconsciously related to the individual perceiver (*ātman*) or to some one else (*taṭastha*) ; but the creations of art are wholly impersonal. It is not

20 The commentary on Alaṁkāra-Sarvasva refers to as many as a dozen theories. (Vide P. 9.)

21 The *Kāvyapradīpa* indentifies this theory as the one corresponding to the Sāṁkhya.

given to the ordinary man to transcend personal relations; art by its impersonalised forms affords the best means for a temporary escape from the ills of life arising from such relations.

(ii) The next point refers to three stages in the appreciation of poetry which gradually lead up to aesthetic experience. The first of them is the apprehension of the meaning of the words of a poem; the second the finding through them of generalised conceptions unrelated to any one in particular and lastly the actual experience of delight. This statement brings out clearly the characteristic of the Sāṁkhya theory that aesthetic delight is the result of contemplating the imaginative and therefore impersonal creations of the poet. In the passage quoted above these three states are represented as *vyāpāras* or processes ascribable to a work of art. The first of them is *abhidhā* by means of which the words constituting a poem convey their ordinary meaning. The second is *bhāvanā*.[22] It is the process of impersonalising by virtue of which the accessories of the emotion portrayed such as the *vibhāvas* become generalised (*sādharaṇīkṛta*) thereby gaining a power of equal appeal to all. The words and their literal meanings are not therefore to be regarded as important in themselves but only as pointing to these generalised ideas. The third or *bhogīkaraṇa* is that by virtue of which we are enabled to derive pure pleasure—bhoga—from these idealised creations of the artist. The purpose of evolution in

22 The word *bhāvanā* reminds one of *Mīmāṃsā* and it is possible that *Bhaṭṭanāyaka* was indebted to that system of philosophy for this conception. He was, we know from *Abhinavagupta*, a *Mīmāsaka*. In one of his many unkind remarks against *Bhaṭṭanāyaka*, *Abhinavagupta* suggests this. Cf. D. A. p. 63.

the Sāṁkhya is *bhoga* and *apavarga* and the use of this word *bhoga* in this passage constitutes a link connecting the present theory with the Sāṁkhya. What is implied by the use of this word here is that the artistic attitude in spite of its being the source of unalloyed pleasure is more akin to the empirical than to the saintly attitude. Of these three *vyāpāras* the first is recognised by all. But it appears strange that the remaining two should be ascribed to a work of art. If however we remember that this theory is based on the Sāṁkhya we see that the statement is not altogether inappropriate. The *Puruṣa* according to the Sāṁkhya conception is absolutely passive so that all activity must be of *Prakṛti*. *Prakṛti* not only creates everything but also brings about *Puruṣa's* experience of pleasure and pain through them, by means of its own agency. Thus Prakṛti discharges two functions: (a) that of evolving the things through which pleasure or pain may be derived, and (b) that of enabling Puruṣa to experience such pleasure and pain. These two steps may be seen in art also, if we distinguish the apprehension of idealised forms from the aesthetic enjoyment derivable from them. There is no doubt a touch of personification in the manner of its statement by *Bhaṭṭanāyaka*: but that is probably to be attributed to a desire to maintain the parallelism with Sāṁkhya metaphysics.

(iii) The third point refers to the nature of the aesthetic attitude itself. This attitude is one of *Saṁvit*, *i.e.*, contemplation dissociated from all practical interest as is shown by *viśrānti*—'composure'. Thus the artistic attitude differs from the natural as well as the spiritual attitude; for while the former is not always pleasurable and the latter neither pleasurable

nor painful art produces a condition of pure pleasure. We have here the expression *sattvodreka* which is important inasmuch as it contains another indication of the theory being based upon Sāṁkhya philosophy.

19. To sum up the essential differences between the Vedānta and Sāṁkhya aesthetics. According to pessimistic Sāṁkhya, Nature is not wholly beautiful but has in it phases of beauty as well as of ugliness. It does not indeed say the objects in Nature do not give delight at all. What it means is that there is nothing in Nature which at all times is pleasurable to all. For pure unalloyed pleasure we must therefore look elsewhere than in the real world. According to optimistic Vedānta on the other hand every thing is beautiful and there is nothing in the universe to mar its inward harmony. This is indeed the first corollary of the *ātman-doctrine;* and the saint is the greatest artist, for everything delights him. Although we may not possess the saint's knowledge that every thing is *ātman*, we can occasionally derive aesthetic enjoyment from Nature. But ordinarily we are too dull to perceive the beauty of the universe. The artist who is endowed with an eye for the beautiful derives pleasure from Nature where we cannot and through the expression which he spontaneously gives to his feeling, he opens our eyes to what we miss. In a sense this art is nature herself presented in such a manner that it appeals to us. The aim of art according to both the systems is to induce a mood of detachment. But according to idealistic Vedānta the artistic attitude is characterised by a forgetting, though temporary, of our individuality ; while according to realistic Sāṁkhya, it is due to an escape from the natural world. According to the former, art

serves as a pathway to Reality; but according to the latter, it is so to speak a 'deflection' from Reality. The one reveals the best in Nature, while the other fashions something better than Nature.

20. I must in conclusion say a word in regard to my selecting a subject which may appear to some as rather out of the way. Research has till now been largely confined to linguistic, historical and similar aspects of oriental learning; but there are still other aspects of it which cannot be regarded as either less instructive or less interesting. It appears necessary in the future not only to carry research further in the departments already worked, but also to widen considerably the sphere of research itself. What I have attempted in this paper does not profess to be more than a first and a very imperfect sketch of the subject I have selected; but I trust it is sufficient to indicate what vast fields of ancient Indian learning lie unexplored.

TRIVIDHAM ANUMĀNAM
OR
A STUDY IN NYĀYASŪTRA I. 1. 5.

By A. B. Dhruva.

The Sūtra which we propose to study runs thus :—

अथ तत्पूर्वकं त्रिविधमनुमानं पूर्ववत् शेषवत् सामान्यतोदृष्टं च । I. i-5.

Leaving aside the minor uncertainties about the meaning of *tatpūrvakam*, viz., whether *tat* means the several pramāṇas of Sūtra I i. 3, or only pratyakṣa of Sūtra I. i. 4 and this, again, one or more,* we pass on to the important question, What are the kinds of Inference —the TRIVIDHAM ANUMĀNAM—referred to in the particular sūtra ?

1. According to Vātsyāyana, who as the Bhāṣyakāra of the Nyāyasūtras is expected to be our best guide in this matter, the three kinds of Inference are no doubt (1) Pūrvavat (2) Śeṣavat and (3) Sāmānyatodṛṣṭa; but he is not sure about the meanings of these terms, of which he gives two alternative explanations together with their appropriate illustrations. These are :

(i). (*a*) Pūrvavat or Inference from the Antecedent to the Consequent, i.e., from Cause to Effect ; e.g. from thickening clouds to an impending shower of rain ;

(*b*) Śeṣavat or Inference from the Consequent to the Antecedent, i. e., from Effect to Cause e. g. from an unusually full and fast current of a river to a heavy shower of rain in the uplands ;

(*c*) Sāmānyatodṛṣṭa or Inference from the Coordinate i. e., from one case to another falling under the same class but not connected with it by

*N. Vart.

the relation of cause and effect. For example, we know that a person, say Devadatta, who is seen at two different places in succession has moved from one place to the other ; similarly, the sun which is observed at two different places in the sky in succession must have moved from one place to the other. Here, Devadatta and the sun are not related as cause and effect ; but they are both cases of material bodies, and our inference here is from one co-ordinate to another.

(ii) *Or*, again, the same three terms in question may mean the following, says Vātsyāyana :

(*a*) Pūrvavat i.e., Inference from former experience (sensuous perception) ; as, for example, we infer fire from smoke, on the basis of our former experience of smoke as accompanied by fire ;

(*b*) Śeṣavat i. e., Inference by Exclusion ; as, for example, we can exclude Śabda from the categories of Sāmānya, Viśeṣa and Samavāya on the ground of its being a non-eternal reality, and next show how for certain reasons it cannot be referred to the categories of Dravya and Karman, thus leaving Guṇa alone in the field as the only remaining category to which Śabda can belong.

(*c*) Sāmānyatodṛṣṭa i. e., Inference of something which is supersensible from something which is sensible, on the ground of the latter being found to be possessed of a nature which it shares in common with certain other things. Thus, for example, we infer the existence of Ātman, which is a supersensible reality, from certain sensible realities such as icchā (desire) etc., in consequence of their possessing the common nature of guṇas (qualities) which require a substance to support them.

The two sets of explanations, together with their illustrations, are so radically different from each other that the writer evidently seems to be groping in the dark for the real meaning of the Sūtra.

2. Our next guide along this much-trodden but little-understood path is Uddyotakara, the Nyāya-Vārtikakāra. In him we alight upon a world of still greater uncertainty about the meaning of the Sūtra. His *alternative* explanations are as follows :—

(i) The three kinds of Inference may be what are known as Anvayavyatireki, Anvayi and Vyatireki, the word trividham in the Sūtra referring not to the classification contained in the Sūtra itself viz. Pūrvavat, Śeṣavat, and Sāmānyatodṛṣṭa but to a classification which is supposed to be *understood*, and of which the reader is expected to take what lawyers call 'judicial notice.'

(ii) The unsatisfactory character of this mode of interpreting the Sūtra is obvious, and so the Vārtikakāra proposes another interpretation in which the word trividham refers to Pūrvavat, Śeṣavat and Sāmānyatodṛṣṭa i.e. to the classification contained in the Sūtra itself. But here, again, he does not take the terms Pūrvavat etc. as signifying the three *kinds* of inference but as laying down the *conditions* of a valid Inference. Thus :—

(*a*) Pūrvavat means that the hetu should be invariably accompanied by its antecedent (Pūrva) viz., the *Sādhya* ; (*b*) Śeṣavat means that the hetu must have been observed as invariably accompanied by the Sādhya in *other* (śeṣa) cases ; and (*c*) Sāmānyatodṛṣṭa, which should be broken up into sāmānytaḥ and adṛṣṭa, means that the hetu is *not common* to Sādhya and

Sādhyābhāva, that is to say, it should not be what is called Sādhāraṇa hetvābhāsa.

To these three two more conditions are added by a *tour de force* which consists in extracting them from '*ca*' at the end of the Sūtra. These are ;

(*d*) that the Inference should not be opposed to Pratyakṣa and (*e*) that it should not be opposed to Āgama. All the five conditions will have to be fulfilled in the case of a good anvayavyatireki, and four in each of the other two, viz., Kevalānvayi and Kevalavyatireki.

(iii). Lastly, the Vārtikakāra accepts the meanings of Pūrvavat and Śeṣavat as given by the Bhāṣyakāra in his first alternative explanation, and adds remarks to show how the words Pūrvavat and Śeṣavat may mean cause and effect respectively, and how the illustrations in the Bhāṣya may be expressed in the set form of a Naiyāyika Anumāna. But in regard to Sāmānyatodṛṣṭa not only does he give a different illustration but takes the liberty of criticising the one given in the Bhāṣya. Thus, Sāmānyatodṛṣṭa in his opinion, is that general case in which the relation between the hetu and the sādhya is not causal, and yet the inference is valid. For example, we may infer the existence of water at a particular spot from the appearance of cranes thereabout. The illustration given in the Bhāṣya that of the motion of the sun as inferred from its appearance at two different places at two different times is rejected by the Vārtikakāra on the ground that the sun after all is not found to be actually travelling, and all that we see is that the solar orb was then there and is now here. In the absence of actual observation of motion, on the simple ground of likeness between the sun and Devadatta, we cannot infer, he argues, that the sun is moving.

3. Coming next to Vācaspatimiśra, the famous writer of the commentary called *Nyāyatātparyaṭīkā* on Uddyotakara's *Nyāyavārtika* we notice a very curious jugglery played with the words of the Sūtra. Thus, in connection with Explanation 1 of the Vārtika, he says :

एतदुक्तं भवति । अबाधितविषयमसत्प्रतिपक्षं पूर्ववदिति ध्रुवं कृत्वा शेषवदित्येका विधा, सामान्यतोदृष्टमिति द्वितीया, शेषवत्सामान्यतोदृष्टमिति तृतीया । तदेवं त्रिविधमनुमानम् ।

that is to say, the conditions, (*a*) (*d*) and (*e*) of the Vārtikakāra's Explanation 1 are essential to all valid inferences ; while (*a*) Śeṣavat (=sapakṣe satvam) is essential to one, viz., kevalānvayi (*b*) Sāmānyatodṛṣṭa (=Vipakṣādvyāvṛtti) to the second viz. kevalavyatireki, and (*c*) Śeṣavatsāmānyatodṛṣṭa to the third viz., anvayavyatireki.

In commenting upon the Vārtikakāra's rejection of the third illustration given under the Bhāṣyakāra's Explanation 1, he points out two reasons : first, that the illustration is obscure, and secondly, that it does not essentially differ from the illustration wherein we infer a Cause from its Effect ; as, for example, the motion of the sun may be inferred as a cause from the sun occupying a new point in the sky, which is its effect.

Next, stepping out of the circle of the Nyāyadarśana, we notice that the Trividha Anumāna of Gotama has found favour with other schools of Indian Philosophy also. Thus,

4. Īśvarakṛṣṇa, the author of the *Sāṁkhyakārikā*, takes the foregoing division of Anumāna as well-known. Without enumerating the three kinds, and just remarking that Anumāna is said to be of three kinds (trividhamanumānamākhyātam S. T. K.5,) he goes on to

state that the supersensible principles of the Sāṁkhya system can be proved by Sāmānyatodṛṣṭa anumāna.

5. Gauḍapāda in his *Bhāṣya* on the *Kārikās* supplies the names of the other two kinds of Anumāna, and explains and illustrates the varieties as follows :—

पूर्वमस्यास्तीति पूर्ववत् यथा मेघोन्नत्या वृष्टिं साधयति पूर्वदृष्टत्वात्। शेषवत् यथा समुद्रोदकं जलपटलं लवणमासाद्य शेषस्याप्यस्ति लवणभाव इति। सामान्यतोदृष्टं देशान्तराद्देशान्तरं प्राप्तं दृष्टं गतिमच्चन्द्रतारकं चैत्रवत् यथा चैत्रनामानं देशान्तराद्देशान्तरं प्राप्तमवलोक्य गतिमानयमिति तद्वच्चन्द्रतारकमिति। तथा पुष्पिताम्रदर्शनादन्यत्र पुष्पिता आम्रा इति सामान्यतोदृष्टेन साधयति एतत् सामान्यतोदृष्टम्।

6. In the *Māṭharavṛtti*, which is reported to be the basis of Gauḍapāda's *Bhāṣya* on the *Sāṁkhya Kārikā*, we have the illustrations of both Pūrvavat and Śeṣavat brought under the single head of Pūrvavat, which, is explained as पूर्वामियं (विधा) दृष्टेति पूर्ववत् i.e. Inference from former experience; while, Śeṣavat is explained and illustrated as an argument from a part to the rest, e.g. from the brackish taste of a drop of sea-water to that of the rest of the sea-water (समुद्रोदकबिन्दुं प्राप्य शेषस्य लवणभावोऽनुमीयत इति शेषवत्); and Sāmānyatodṛṣṭa is described as an argument founded on a general principle which must apply to all the individuals of a class, to those as well as to these; e.g., 'as these mango-trees have flowered, so must have those' (सामान्यतोदृष्टं पुष्पिताम्रदर्शनादन्यत्र पुष्पिता आम्रा इति)

In addition to the above explanation of 'Trividha Anumāna,' Māṭhara has some exceedingly valuable information to impart while commenting upon the word Trividham. Trividham besides meaning 'of three kinds' may be also, he says, trisādhanam, tryavayavam. Here

1 For the use of the Māṭharavṛtti, which is still in manuscript, I am indebted to Dr. S. K. Belvalkar of the Deccan College, Poona.

Māṭhara duly notes that according to some, it may be pancāvayavam i. e. five-membered and the five members are enumerated as follows :—

प्रतिज्ञा, अपदेश, निदर्शन, अनुसंधान and प्रत्याम्नाय [2] —

corresponding to the Nāiyayika's प्रतिज्ञा, हेतु, उदाहरण, उपनय and निगमन respectively. In explaining, tryavayavam Māṭhara states that the three avayavas are pakṣa, hetu and dṛṣṭānta. Obviously, these are names not of terms but of propositions. Thus, Pakṣa means pratijñā or Enunciation of the proposition; Hetu is the statement of Reason ; and Dṛṣṭanta is Udāharaṇa i.e. statement of invariable association supported by Example. The author then proceeds to add that there are nine types of Pakṣābhāsa i.e. false pakṣa or pratijñā, fourteen of Hetvābhāsa i.e. false hetu, and ten of Nidarśanābhāsa i.e. false nidarśana or dṛṣṭānta. Thus, a good anumāna, which contains the three avayavas viz. pakṣa, hetu and dṛṣṭānta should be free from thirty-three ābhāsas i.e. false appearances or fallacies. [3] Again, the author observes in passing that a hetu should be trirūpa or three-formed i.e. it should satisfy three conditions, viz ; पक्षधर्मत्वम्, सपक्षे सत्त्वम्, विपक्षे चासत्त्वम्.

7. The *Pūrvamīmāṃsā Bhāṣya* of Śabarasvāmin is another great work outside the school of Nyāya which notices this subject. It defines Anumāna as a movement of thought from a part which is present before the senses to another part which is not so, in virtue of their being known to be (invariably) associated ; and it divides it into two kinds, pratyakṣatodṛṣṭasambandha and sāmānyatodṛṣṭasambandha, the former being illustrated

2 Compare Praśastapāda Bhāṣya on Vaiśeṣika Sūtras.

3 Compare Nyāyapraveśa and the commentaries thereon.

by the case of smoke and fire whose invariable association is known by perception, and the latter by that of the sun's motion and its occupation of a new point in the sky, i.e. a sādhya and a hetu, whose connection is not apprehended by the senses but is only known in the abstract. Thus, the sāmānyatodṛṣṭa of Śabara is the same as that of the *Sāṁkhyakārikā* and the *Nyāyabhāṣya* Expl. 1, while the Pūrvavat and Śeṣavat of the latter are rolled up into a single pratyakṣatodṛṣṭa.

8. Lastly, we have a very detailed and interesting exposition of the 'Trividham Anumānam' in *Anuyogadvāra* which is a canonical work of the Śvetāmbara Jainas. Here, Anumāna is divided into (1) पुव्वव, (2) सेसव, and (3) दिट्ठसाहम्मव i.e. the same types as those mentioned in Gotama's Sūtra, and no doubt borrowed from it, with a careless, or, it may be, careful and deliberate addition of 'vat' (va) at the end of the last term, thus making it uniform with the preceding two. The different kinds are illustrated, and in some cases also subdivided as follows :

(1) Puvvava=as before i.e. Inference from marks *formerly* observed. Thus, a mother recognises her child from such physical marks as she has observed before, e.g. a mole or a scar. The illustration in the text is, moreover, supported by a quotation[4] which goes to show that there had been earlier writers, probably Jains, who had dealt with the subject.

(2) Sesava=Inference from the *other* i.e. of one member of a pair of correlates from the other. This is of five kinds :

(*a*) Kajjeṇam (Kāryeṇa) i.e. Inference of a cause from its effect. Thus, says the writer, we infer a

4 माया पुत्तं जहा नट्ठं जुवाणं पुणरागयं ।
काई पच्चाभिजाणेज्जा पुव्वलिंगेण केणइ ॥

conch from the sound of its blowing, a drum from its beating, a bull from bellowing, a peacock from its peculiar note, a horse from his neighing, a yak from her gurgling, and a chariot from the tinkling of its bells.

(*b*) Kāraṇeṇam—Inference of an effect from its cause. For example, threads are a cause of a piece of cloth and not vice versa, grass fibres are a cause of a mat and not vice versa, a ball of clay is a cause of a jar and not vice versa. The exact point of these illustrations is somewhat obscure[5], and the commentator, in view of the obscurity, supplies other illustrations of this type which means that given all the causes, the effect must follow e.g. from a particular look of the clouds one may infer a sure rainfall, from the rise of the moon its necessary effect viz. a tide in the sea, from the rise of the sun its necessary effect viz. the blooming of day-lotuses, and so on.

(*c*) Guṇeṇaṃ—Inference of Substance from its Attribute. Thus, we infer gold from its test, a flower from its smell, salt from its taste, wine from its flavour, cloth from its feel etc.

(*d*) Avayaveṇaṃ—i e. Inference of the Whole from its Part. Thus, e.g. we infer a buffallo from his horn, a cock from its crest, an elephant from his trunk, a boar from his tusk, a peacock from its feathers, a horse from his hoof, a tiger from his paw, a yak from her hair etc.

(*e*) Āsayenaṃ[6] —i.e. Inference as regards the Abode from that which abides therein, e. g. of fire from

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5 It is probably this : When we infer that a piece of cloth will be woven out of certain threads, we go from Cause to Effect, and not from Effect to Cause, and yet it is a sound inference. Hence the second variety requires to be recognised quite as much as the first whose claim is obvious.

6 This is explained by the commentator as आश्रयतीत्याश्रयः (तेन) and therefore as practically equivalent to आश्रितेन.

smoke, or water from cranes, a shower of rain from turbid waters, a gentleman from his character and general demeanour.

(3) diṭṭhasāhammava = Inference from *similar* cases This is of two kinds; (*a*) sāmannadiṭṭham and (*b*) visesadiṭṭham.

(*a*) Sāmannadiṭṭham is Inference from that which is observed as a point in common to all the individuals of a group, e.g. 'as one man, so many; as many, so one.'

(*b*) Visesadiṭṭham is Inference from that which is observed as a distinguishing trait of a certain individual amidst a group, e.g. when one recognises a friend from amongst a number of men in a crowd.

The treatment of the subject, already too much detailed, does not end here. Anumāna is further divided according as it refers to time past, present or future, and these divisions are illustrated at great length.

II.

Such are in brief, the expositions of the "Trividham Anumānam" in and outside the school of the Nyāyadarśana. While there is practically complete unanimity as regards the names of the three types of Anumāna, there are serious differences in respect of what the names are intended to convey. Thus: (1) Pūrvavat may mean Inference from a cause, or simply Inference form fromer experience, or even recognition from a formerly observed mark;

(2) Śeṣavat may mean an Inference from Effect, or Inference of one member of a pair of Correlates

from the other, or Inference from a Part, or a totally different type of Inference, viz. Inference by Exclusion.

(3) Sāmānyatodṛṣṭa may mean Inference based on mere likeness or uniformity of experience, without Causation at its back, or may mean Inference of supersensible truths through abstract generalities.

The one impression which these differences *collectively* leave upon the mind is that the expositors, whether right or wrong, are all more or less groping in the dark about the original meaning of the Sūtra, from which they seem to be separated by a considerable interval of time. The time appears to have been long enough to make such diverse schools of thinkers as the Naiyāyikas, the Sāṁkhyas, the Mīmāṃsakas, and even the Jainas join hands in accepting verbatim the 'three kinds of Anumāna" mentioned in Gotama's Sūtra. They have no doubt some sort of a broken tradition regarding the original meaning of the terms Pūrvavat etc., as would appear from the same explanations, and what is more remarkable, the same illustrations recurring in several of the works. But the tradition is sometimes lost or obscured by the writers' own[7] ideas of the general principles of Logic crowding thickly upon their brain even while they are actually dealing with a much narrower subject viz. the three kinds of Anumāna.

I would go further and add that not only is the earliest of the works cited above—which I believe to be Vātsyāyana's *Bhāṣya*— far removed in time from Gotama, but even Gotama himself has borrowed the terminology of the Sūtra (I. i. 5) from older "Naiyāyikas," who, I submit, were the ancient Mīmāṃsakas. Vātsyāyana,

7 Vide Uddyotakara's Nyāyavārtika.

when he says that Pūrvavat and Śeṣavat may mean, respectively, Inference from Cause and Inference from Effect, is doubtless in possession of the real meanings of the terms as used in the Sūtra. But he does not seem to know that they were borrowed from the vocabulary of Mīmaṃsā where the words Pūrva, and Śeṣa, are of frequent occurrence. Thus, we read in the Pūrva Mīmāṃsā Sūtras :

विधिर्वा स्यादपूर्वत्वात् वादमात्रं ह्यनर्थकम् (I,ii, 19). न पूर्वत्वात् (I, ii, 22), विधिश्चानर्थकः क्वचित्तस्मात् स्तुतिः प्रतीयेत तत्सामान्यादितरेषु तथात्वम् (I. ii, 23), अर्थस्तु विधिशेषत्वात् यथा लोके (I. ii 29) शेषः परार्थत्वात् (III. i. 2), द्रव्यगुणसंस्कारेषु बादरिः [शेपशब्द इति मेने] (III. i. 3) अर्थाभिधानसामर्थ्यान्मन्त्रेषु शेषभावः स्यात् (III ii. 1.) etc.

In the *Mīmāṃsā Sūtras*, Sāmānya, i.e., likeness or participation in a common class, is often made the basis of an argument from parallel instances. Pūrva and Śeṣa i.e. the prior and the remainder, which primarily mean the logically prior and the posterior part of a sentence or paragraph, are sometimes used in connection with vidhi and arthavāda respectively; and the two being parts of one organic whole, argument from one to the other becomes easily possible. Śeṣa, which means the remainder, is also subsidiary as opposed to principal or primary, to which the term pūrva may be applied. In the sense of subsidiary, the term is sometimes applied to arthavāda, and is, moreover, used to denote the relation of a thing to its ultimate end, such as that of dravya, guṇa and saṁskāra to kriyā, or of karman to phala, or of phala to puruṣārtha or of puruṣa to karma, and so forth. Now, it is obvious that in Mīmāṃsā, an argument from śeṣa would be an argument from the subsidiary to the principal in thought, and so long as Mīmaṃsā was merely a science

of the laws of Interpretation, the meaning of Śeṣa would hardly travel beyond the region of thought. But the passage from thought to being, from ratio to cause in the present case, is not difficult, and the necessary in thought could easily become the necessary in being. Thus, the words pūrva and śeṣa which at first stood for certain relations of necessary connection in a group or groups of words, or of things symbolised by them, could well be used for denoting Cause and Effect respectively.

It is very significant that nowhere in the Nyāyadarśana—neither in the Sūtras nor in any later work—the words pūrva and śeṣa bear the sense of Cause and Effect, except in the single Sūtra which we are here discussing. Moreover, if the Naiyāyikas had originally attempted to express the ideas of Cause and Effect by the category of succession they would have employed the words पूर्व or पर, and उत्तर or अपर, and not pūrva and śeṣa, the last word being entirely foreign to their vocabulary. Hence, it is clear that for the terminology of the "Trividha Anumāna" Gotama is indebted to earlier[8] Mīmāṃsakas, who were not only exegetes

8 That Nyāya was a synonym of Mīmāṃsā was known even to such latter-day writers of Mīmāṃsā as Mādhava and Pārthasārathimiśra, who called their works Nyāyamālāvistara and Nyāyaratnākara. Note that the word Nyāya is used in the sense of a general proposition in the Ṛg-Veda Prātiśākhya न्यायमिश्रानपवादान् प्रतीयात् (Ṛg-Veda Pr. I Patala). Besides, in his paragraph on the members of a syllogism, Vātsyāyana remarks that "some Naiyāyikas" (एके नैयायिकाः) hold that a syllogism has ten members, which we should have prima facie supposed to be those mentioned in the Niryukti of the Daśavaikālika Sūtra of the Jainas. But Vātsyāyana mentions the five which the above-mentioned "Naiyāyikas" add to those recognised by Gotama as follows : जिज्ञासा, संशय, शक्यप्राप्ति, प्रयोजन and संशयव्युदास. These additional five members have such a clear Mīmāṃsa ring about them that one cannot help suspecting that the "Eke Naiyāyikaāḥ" of Vātsyāyana are a section of the earlier Mīmāṃsakas.

but also logicians. Thus, for the origin of the Sūtra relating to the Trividha Anumāna we are carried far back into the distant past when the Mīmāṃsakas were the only Naiyāyikas, when the priests held their parṣads, and discussed the questions of Philosophy, Ritual, and Law round the sacrificial altar or on the judicial bench. Like Geometry, Astronomy, Music, and Surgery, Logic too would seem to have been born in the yajñavāṭa, and the Sūtra under notice is a reminder of its ancient origin.

This conclusion about the antiquity of Indian Logic is corroborated by the evidence of Buddhistic Sūtras. These contained not only general references to rationalistic disputants, wranglers and sophists, among Brāhmaṇas and śramaṇas, such as तक्की, वीमंसी, वितण्ड, etc. but also to such technical detail of the art of debate as आरोप, निग्गह, वादप्पमोक्ख, and, further more, they presuppose a fixed form of carrying on a debate so that a man who inverted the recognised order of propositions was taken to task; Thus, पुरे वचनीयं पच्छा अवच पच्छावचनीयं पुरे अवच.

But, be it noted that the question before us is not of the antiquity of Indian Logic in general, but of its particular topic viz. the Trividha Anumāna, and, therefore, the evidence cited from the Budhistic Sūtras can only raise a general presumption in favour of the latter's antiquity but it cannot place it beyond dispute. For this, we have to rely upon the internal evidence of the terminology of the Sūtra, which, as we have seen, points to the age of the early Mīmāṃsaka logicians.

To it I now propose to add some external evidence, which has not hitherto attracted sufficient attention. This evidence is to be found in the Jaina Āgamas. We

have already seen that barring the prākṛtization and a slight attempt at improving upon the last word in the Sūtra by substituting साहम्म (साधर्म्य) for सामान्य so as to include both सामान्य and विशेष, the division of Anumāna contained in the Anuyogadvāra is word for word the same as that contained in Gotama's Sūtra. Now, according to the Jaina tradition, the Anuyogadvāra in its present form was composed by Āryarakshita who lived towards the end of the first century A.D. But that does not mean that the work was an original production of Āryarakshita. Āryarakshita and Devardhigaṇi are responsible for the existing redaction of the Jaina Siddhānta, but they are supposed to have only reproduced or rearranged what they already found existing under that title. We have proof of this in the fact that the Bhagavatī Sūtra which is one of the Aṅgas of the Jaina Scripture settled at the Council of Pāṭaliputra in the beginning of the third century B.C., refers to Anuyogadvāra and several other works, although in their present form they are of a later date. Thus it says : "जहा अणुउगदारे, जहा नन्दी, जही पन्नवणाए" &c. The reference to Anuyogadvāra, moreover, is made in connection with the subject of Anumāna,[9] thus guaranteeing with almost absolute certainty that the passage relating to Trividha Anumāna in the Anuyoga belongs to the original edition of the work, which as we have seen existed even before the compilation of the Bhagavatī Sūtra in the time of Bhadrabāhu i.e. before the third century B.C. Now let us allow some time between the Bhagavatī and the Anuyoga to admit of the former quoting the latter, and then allow still another interval of time required to account for a

9 से किं तं पमाणेर चतु प्पिहे पंतं पच्चरवे अणुमाणे ठवमे आगमे जहा अणुउगदारे—Bhaga. v. 4.

Jain writer adopting with equanimity the division of Anumāna which was originally formulated by Brāhmaṇas,[10] and we shall have very nearly reached the period of the early Mīmāṃsakas who were our first logicians.

This does not mean that all the Nyāya Sūtras are as old as the one under consideration. We should be careful not to extend the conclusion drawn from the study of a single Sūtra, that relating to the Trividha Anumāna, to the whole of Gotama's work in its present form. But I demur to the view put forward by Dr. S.C. Vidyābhūṣaṇa that the present work of the Nyāya Sūtras should be credited to a writer of the second century A. D., whom Dr. Vidyābhūṣaṇa calls Akṣapāda, as distinguished from Gotama, and also to Vātsyāyana who is supposed to have added certain Sūtras of his own and generally revised the work of his predecessors while writing his Bhāṣya. The distinction made between Gotama and Akṣapāda is contrary to the generally accepted tradition about their identity, and the evidence adduced to prove that Vātsyāyana was later than Nāgārjuna is altogether inconclusive, as I shall show in the sequel. Moreover, I beg to demur still more strongly to another view recently expressed

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10 Later Jain writers show a disinclination to adopt these divisions of Anumāna. They attribute them to Naiyāyikas (Brāhmaṇa logicians) and condemn them in unequivocal language. Thus,

पूर्ववत् शेषवत् सामान्यतोदृष्टमित्यादि । तद्बालप्रलपितप्रायमित्यवगन्तव्यम्
(Nyāyavivṛti)

एतेन तत्पूर्वकं त्रिविधमनुमानं पूर्ववच्छेषवत्सामान्यतोदृष्टं च नैयायिकपरिकल्पितमनुमानलक्षणं प्रतिक्षिप्तम् ।

—(Abhayadevasūri's तत्त्वबोधविधायिनी टीका on संमतितर्क.)

For the latter I am indebted to Muni Śrī Nemi-Vijayajī of Ahmedabad.

by the learned scholar that the word 'अवयव' is a Sanskrit translation of the Greek "Analytics" and that the whole subject of Syllogistic Reasoning has originated and developed under the influence of Aristotle. Apart from the general lack of historical evidence showing that Indians had heard of Aristotle or any foreign logician, Dr. Vidyābhūṣaṇa's theory would require the very first Sūtra of the Nyāyadarśana which contains the word अवयव to be thrown overboard or placed on the list of 'suspects'; and, further, it would have us believe that one whole branch of western learning was imported into India, and that, too, by many hands and across many centuries without leaving a single philological vestige behind to betray its foreign origin. Such a supposition would be contrary to what we have observed in the history of Indian Mathematics, Astronomy and Medicine, wherein a foreign influence has never failed to be detected under the microscope of Comparative Philology. A closer examination of this question will carry us far beyond the limits of this paper, and should be deferred to a more suitable occasion.

The results of this part of our inquiry may be summed up somewhat as follows :—

1. The first glimmer of the light of Indian Logic belongs to the pre-Buddhistic age of the Parṣads.

2. The early beginnings of a systematic Art of Logic belongs to the latter part of the same age.

3. The Art tends to become a Science in the period of early Buddhism and its contemporary Brāhmaṇism.

4. It has established itself as a Science before 300 B. C.

5. The results of Brāhmaṇical thought in this department, as linked with Theism and Realism, get summed up in the Nyāya-Sūtras of Gotama, as similar work of Jain and Buddhist logicians, carried on of course in harmony with their own religious and philosophical dogmas, is represented in the corresponding fragments of the Jain and Buddhistic literatures.

6. Gotama's Sūtras, not necessarily all their contents, some of which are earlier, belong to the latter half of the Pre-Christian Sūtra period. The work may be dated somewhere about 200 B.C., in the age of the Āhnikas or Daily Lessons, like the Navāhnikas of Patañjali's Vyākaraṇa Mahābhāṣya.

III

So much for the date of Gotama's Nyāya Sūtra I. i. 5 which we considered in the light of the *general* uncertainty which prevails among commentators regarding its meaning. Next let us turn our thought to points which arise from a comparison of some of the commentaries *inter se.* And here I would beg my readers to draw conclusions from the collected data unhesitatingly, without any pre-conceived and rigid notions in regard to the dates of particular authors which may thereby be affected.

1. Now, if we compare Vātsyāyana's account of the Trividha Anumāna with that given in the Anuyogadvāra, we cannot but be impressed by the great mass of details which the latter possesses as distinguished from the former.

2. In the same way, if we compare Māṭhara's exposition of the subject with Vātsyāyana's, we cannot help concluding that Māṭhara represents a step forward

in the history of Indian Logic. This may appear "adharottaram" to those who are committed to the theory of Vātsyāyana's belonging to the fifth century A. D., *i. e.*, after Nāgārjuna, and, perhaps, after Asaṅga also. But the logical doctrines known to Māṭhara are so clearly in advance of Vātsyāyana's knowledge of the subject, that this very fact calls for a re-adjustment of the date of Vātsyāyana as determined by Dr. Vidyābhūṣaṇa[11]. On comparing Vātsyāyana's knowledge of Anumāna with that of Māṭhara we notice that Vātsyāyana is acquainted with only two types of Anumāna : the ten-membered and the five-membered. Had he been aware of the three-membered, he would have mentioned it along with the ten-membered to which he has devoted a special paragraph in his Bhāṣya. Besides, he explains "Trividha" as "of three kinds", and also as "Tri-sādhana" and "Tri-avayava". Here in addition to declaring the three conditions of a good hetu Māṭhara refers, as we have already seen *supra*, to 33 kinds of fallacies, 9 of पक्ष, 14 of हेतु and 10 of निदर्शन or दृष्टान्त—an amount of logical wealth far beyond the dream of Vātsyāyana. Moreover, from the manner in which they are introduced, without explanation or illustration, it would seem that they were all very well known in his days, and a fair amount of time may therefore be supposed to have passed before their general recognition became possible.

3. Next, as between Māṭhara-Vṛtti and Anuyogadvāra, Māṭhara-Vṛtti is undoubtedly earlier, it being referred to as an example of 'नोआगम भावश्रुत' in Anuyoga.

11 The passage is repeated in the Nandi sūtra with slight variations, *i. e.*, it introduces भाग्वं and पायंजली and splits up माढर पुराण वागरण into माढरं पुराण वागरणं etc.

Bearing these chronological relations in mind, *viz.*, first Vātsyāyana, then Māṭhara (who may be supposed to be separated from him by at least a century), and last Anuyogadvāra, let us proceed to settle their respective dates. The passage in the Anuyogadvāra which refers to Māṭhara, *inter alia*, throws a flood of light on the whole problem. It runs thus :—

तं जहा भारहं रामायणं भीमासुरुक्खं कोडिल्लयं घोडयमुहं कप्पासिअं नागसुहुम कणगसत्तरी वइसेसिअं बुद्धसासणं काविलं वेसिअं लोगायंतं (ययं) सट्ठितंतं माढर पुराण वागरणं नाटगाइं.

The references which particularly interest us in this passage are those made to कणगसतरी सट्ठितंतं and माडरं. कणगसत्तरी is evidently सुवर्णसप्तति or हिरण्यसप्तति the "Gold-Seventy", which together with a commentary was translated into Chinese by Paramārtha between 557 and 568 A. D. Dr. Takakusu identifies the "Gold-Seventy" with the सांख्यकारिका or सप्तति of Īśvarakṛṣṇa, which, moreover, he believes to be the same as 'Vindhyavāsa's revised Sāṁkhyaśāstra'. He argues thus: Since Īśvarakṛṣṇa is said to have revised the "Ṣaṣṭitantra," and Vindya-Vāsa a "Sāṁkhya- Śāstra," Īśvarakṛṣṇa is to be identified with Vindhyavāsa ; and since Vindhyavāsa is reported by Paramārtha to have been an older contemporary of Vasubandu, whose teacher, Buddhamitra, he defeated, the Sāṁkhyakārikā, which is the same as Hiraṇyasaptati, is to be placed a few years before Vasubandu, whom Dr. Takakusu assigns to the last three-quarters of the 5th century A. D. Thus, the date of the Sāṁkhyakārikā or Hiraṇyasaptati, *i. e.*, of the Kaṇagasattari of our passage, must be fixed at about 450 A. D. according to Dr. Takakusu. But the date of Vasubandhu has been considerably shaken by the researches of N. Peri, and

he is now generally held to have lived between 280 and 360 A. D. Dr. Keith accepts Peri's date of Vasubandhu and, consequently, the period of Īśvarakṛṣṇa and his Sāṁkhyakārikā is according to him thrown back into the 4th century A. D. Further, the author of the 'Ṣaṣṭitantra' which is supposed to be the original of the revised Sāṁkhyaśāstra *i.e.* of the Sāṁkhyakārikā or Saptati, he believes to be Vārṣagaṇya, the teacher of Vindhyavāsa—a fact which, he says, is borne out by (1) Vācaspatimiśra describing a quotation (गुणानां परमं रूपं etc.) in Vyāsa's Yogabhāṣya as one made from Ṣaṣṭitantra ("षष्टितन्त्रानुशिष्टिः")[12] and elsewhere attributing the same couplet to Vārṣagaṇya, and (2) to also the Chinese tradition which ascribes to Vindhyavāsa (Īśvarakṛṣṇa) the rewriting of a work of the 'Rain-host,' *i. e.*, Vṛṣagaṇa or Vārṣagaṇa.

Dr. Belvalkar disputes[13] Dr. Takakusu's identification of Vindhyavāsa with Īśvarakṛṣṇa, and he regards the latter as a predecessor of both Vindhyavāsa and his teacher Vārṣagaṇya, and places him in the 'first or first half of the second century of the Christian era.' For Īśvarakṛṣṇa's priority to Vindhyavāsa and Vārṣagaṇya he relies on the negative evidence of the guru-śiṣya-paramparā given in the Māṭhara-Vṛtti, which makes no mention of the last two writers. He also questions Dr. Takakusu's equation of Po-pó-li (whom a Chinese tradition mentions as a teacher of Īśvarakṛṣṇa) with Varṣa (Vārṣagaṇya), and suggests that Po-pó-li may be Devala[14] of the aforesaid paramparā. Further, he thinks that Hiraṇyasaptati was not the same as Sāṁkhya Sapatati or Kārikā but was 'a distinct work,' some kind

12 "Bhagavān Vārṣagaṇyah"—Vācaspatimiśra.

13 Bhānd. Com. Vol.

14 Query: Is the Chinese P known to be an equivalent of the Sanskrit D ?

of a commentary on Īśvarakṛṣṇa's Sāṁkhya Saptati, written by Vindhyavāsa. As to Ṣaṣṭitantra, he leaves the question of its authorship undecided, but he believes it to be a work 'prior to 150 B. C.' But the young scholar's main contribution to Sanskrit scholarship consists in his having brought to light from the Deccan College Library two Mss. of Māṭhara-Vṛtti, which on comparison he finds to be the original of the Sāṁkhya work which Paramārtha translated into Chinese a few centuries later. Dr. Keith refuses to accept Dr. Belvalkar's view of the Maṭhara Vṛtti being the original of Paramārtha's Chinese translation, and believes that the hypothesis of a 'common source' for both the Māṭhara-Vṛtti and the Chinese translation is not excluded. Besides, he does not think much of Dr. Belvalkar's argument based on the guru-paramparā in the Māṭhara-Vṛtti which contains no mention of Vārṣagaṇya and Vindhyavāsa. Such is the position in regard to the date, and authorship, of Ṣaṣṭitantra, Hiraṇyasaptati and Maṭhara-Vṛtti. It is not possible here to attempt a full discussion of all the points at issue in this controversy, but since they have a close bearing on the dates of Vātsyāyana and Anuyoga, a few remarks may be permitted.

(1) I think Dr. Belvalkar is right in holding that Īśvarakṛṣṇa is not the same as Vindhyavāsa. But this, for the simple reason that there is no evidence whatever to prove their identity, except such as is made up by piling conjecture upon conjecture (see *supra*) for which there is absolutely no justification. The guru-paramparā of the Māṭhara-Vṛtti on which Dr. Belvalkar relies is condemned by Dr. Keith as inaccurate in the light of the Chinese tradition. But

Dr. Keith here appears to have been unfair to Māṭhara in his zeal to demolish Dr. Belvalkar. A careful reading of the passage in question in the Māṭhara-Vṛtti will show that it does not carry the sense which Dr. Belvalkar reads into it and is therefore not liable to the charge of inaccuracy which Dr. Keith has levelled against it. The passage says : " This wisdom (of the Sāṁkhyas) was handed down by Kapila to Āsuri, by Āsuri to Pañcaśikha, from whom it came to Bhārgava, Ulūka, Vālmīka, Hārīta, Devala, and others. Afterwards from them it was obtained by Īśvarakṛṣṇa. That same (wisdom) called the Ṣaṣṭitantra was summarized (by Īśvarakṛṣṇa) in Āryā metres".

The passage leaves no doubt that Devala was not a direct teacher of Īśvarakriṣṇa, any more than Bhārgava, Ulūka, Vālmīka, and Hārīta with whom he is co-ordinated. Moreover, there is ample room in the word 'प्रभृति' ('and others') to hold Vārṣagaṇya, who might thus intervene between Devala and Īśvarakṛṣṇa.

(2) I further agree with Dr. Belvalkar that Īśvarakṛṣṇa—who is not the same as Vindhyavāsa—is to be dated in the first or the first half of the second century A. D. ; but here I would add the words "*at the latest*", thereby reserving my right to carry the date backwards in the light of the date of Anuyogadvāra, which will be considered hereafter.

(3) I do not think that हिरण्यसप्तति was a work of Vindhyavāsa, and 'some sort of a commentary on Īśvarakṛṣṇa's Sāṁkhyakārikā.' I rather think that it was the same as the Saptati or the Sāṁkhyakārikā—the 'Kaṇaga Sattari' of Anuyoga—and its attribution to Vindhyavāsa was due to misapprehension arising from the latter having probably written 'some sort of a

commentary on the Saptati.' Dr. Takakusu quotes a passage from Kueichi, pupil of Hiuentsang, as follows :— "The Sāṁkhya school was formerly split up into eighteen groups, the head of which was Ba-li-sha, meaning the 'Rain' (Varṣa). His associates were all called the 'Rain-host' (Vārṣagaṇya). The 'Gold-seventy' (Hiraṇyasaptati) is the work of them." This does not require us to suppose that the Gold-seventy was a work of Vindhyvāsa ; it only attributes it to the 'Associates' of 'Rain'—the 'Rain-host' (Vārṣagaṇya)—of whom Vindhyavāsa may be one, and the same may be traceable to that of the original founder—one Vārṣagaṇya,—a predecessor of Īśavarakṛṣṇa and one of the sages mentioned in the Mahābhārata. The Ṣaṣṭitantra may conceivably be his work[15]. The Chinese tradition that Vindhyavāsa was a pupil of Vārṣagaṇya may be understood in the sense of his being the 'ācārya' or founder of the School to which Vindhyavāsa belonged later in the third century A. D.

We thus arrive at the following chronological order :—

1. Ṣaṣṭitantra (to be placed before the Christian era : circa 150 B. C., if it be a work of Vārṣagaṇya earlier still, if Pañcaśikha's).

2. Kaṇagasattari (in the first half of the second century A. D. at the latest, the date being subject to alteration in the light of the date to be assigned to the Anuyoga passage).

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15 I do not commit myself to this view. Ṣaṣṭitantra may be even older than Vārṣagaṇya and may have to be ascribed to Pañcaśikha in harmony with the Chinese tradition. Vācaspati Miśra's "षष्टितन्त्रानुशिष्टि" would then mean not a quotation from Ṣaṣṭitantra but 'a teaching in accordance with (अनु) Ṣaṣṭitantra.'

3. Māṭhara-Vṛtti, a commentary on Kaṇagasattari (in the second half of the second, or first half of the third century A. D., subject to alteration in the same way as the Kaṇagasattari).

If we accept Weber's view that the Jaina Siddhānta was given its present shape between the third and fifth century A. D., the latest date for the foregoing passage of Anuyoga will be the beginning of the fifth century A. D. For the same passage occurs with slight alterations in the Nandisūtra, and supposing the Nandisūtra is a work of Devardhigaṇin (end of the fifth century A. D.), the passage in question from Anuyoga will have to be placed some time before it. Now, if Vātsyāyana is later than Nāgārjuna (250 A. D. Dr. Vidyābhūṣaṇa), Vātsyāyana and Māṭhara have to be accommodated in the interval between 250 A D. (the date of Nāgārjuna) and 400 A. D. (the date of the passage of the Anuyogadvāra). Allowing a margin of 50 years on either side, the remaining period of 50 years is all too short to account for the development of logic, such as we have noted above, between Vātsyāyana and Māṭhara. If, on the contrary, we accept the Jaina Śvetāmbara tradition as it stands—and we cannot set it aside except for very cogent reasons—and assign the present edition of Anuyoga to Āryarakṣita [16] who lived in the second half of the first century A. D., the dates of the Sāṁkhyakārikā (= 'Kaṇagasattari') and the Māṭhara-Vṛtti will have to be shifted to the first century B. C. and early part of the first century A. D., respectively. Now, one strong reason for assigning the passage in Anuyoga to the

16 The Jain tradition ascribes not only the division of Anuyoga, but also the compilation or composition of Anuyogadvāra to Āryarakṣita (see Āvaśyaka I. 774).

latter part of the first century A. D., rather than to some period between the third and the fifth century A. D. is that the passage refers to Buddhistic scriptures in an altogether general way—it calls them merely बुद्धसासण[17] while the Sāṁkhya works referred to are no less than three, which are mentioned specifically over and above the general काविलियं (the philosophy of Kapila). Had the Anuyogadvāra been written in the 3rd or 5th century A. D., in the age of such eminent Buddhistic teachers we would have found them or their works mentioned as Nāgārjuna,[18] Āryadeva, Asaṅga and Buddhaghoṣa, individually, as has been done in the case of the Sāṁkhya authors. The list clearly reveals an atmosphere of flourishing Brahmanism which, as we know, characterized the three or four centuries from the death of Aśoka to the coronation of Kaniṣka. That the *Mahābhārata* and *Rāmāyaṇa* were popular works read at certain hours of the day among the people in the time of the Anuyogadvāra does not impair the conclusion we have arrived at. For we know that they were read in the remote Indian colony of Kamboja about 600 A. D., and the custom of reading them as sacred literature may have been established in India several centuries before. Land grants dated in the 5th century A. D., and found in various parts of India, quote Mahābhārata as an authority possessed of the character of a Smṛti or Dharmaśāstra—a status and breadth of popularity which it cannot have acquired in a couple of centuries.

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17 बुद्धवयणं—Nandisūtra.

18 Could Nāgārjuna have been referred to in "नागसुहुम"? Nāgasena could be meant as well. It may be neither. If Nāgārjuna is meant, his date, which is still uncertain, should be pushed up, in the light of the date of the Anuyoga passage.

Having thus seen that the Māṭhara-Vṛtti may with a great deal of probability be referred to the first century A. D., we place Vātsyāyana a century or two earlier, which will account for the vast development of the Science of Logic which took place in the interval between Vātsyāyana and Māṭhara.

The date thus arrived at for Vātsyāyana may appear to be a violent outrage upon the date which is generally accepted among oriental scholars, *viz.*, the fifth century (450) A. D. But I submit, with all due deference to Dr. Vidyābhūṣaṇa, Dr. Jacobi, Dr. Keith and others who share the view, that arguments by which the theory of the fifth century A. D. is supported are in the first place inconclusive, and secondly they have not been co-ordinated with the evidence of the works cited above. If Dr. Jacobi is right in holding that Vātsyāyana's revised edition of the Nyāya-Sūtras discusses the Śūnyavāda or Nihilism of the Mādhyamika school of Nāgārjuna (about 200—250 A. D.) but not the Idealism of the Yogācāra school of Asaṅga and Vasubandhu, he cannot take the latter part of the 5th century A. D. (to which Vasubandhu was assigned by Dr. Takakusu) as the lower limit of the date of Vātsyāyana. For the date of Vasubandhu, as we have already seen, has been pushed back to the third century A. D. by the researches of Peri, and, therefore Vātsyāyana will have to be placed at the latest in the early part of that century. Again, even on Weber's hypothesis of the date of the Jaina Siddhānta, if Anuyoga belongs to circa 400 A. D., and Māṭhara to 350, Vātsyāyana cannot be later than 250 A. D. Although Dr. Vidyābhūṣaṇa's date of Vātsyāyana is thus carried back nearly 200 years, it requires to be pushed up still further by nearly three centuries if we

are to do full justice to the authority of the Śvetāmbara tradition about the composition of Anuyogadvāra. The only difficulty in the way is the supposed posteriority of Vātsyāyana to Nāgārjuna and to the author of the Laṅkāvatārasūtra. It is said that certain aphorisms in the Nyāyasūtra 'do not constitute an essential part of the Nyāyasūtra, and were evidently interpolated into it before or during the time of Vātsyāyana, who wrote a commentary on them.' I wonder how such a statement could be made, despite the fact that the impugned passages discuss (1) the question of the reality of the external world and its cause, which arises directly from the topics of 'प्रवृत्ति' and 'दोष' and (2) another about the nature of बुद्धि whether it is नित्य or अनित्य or क्षणिक wherein the Buddhist standpoint comes naturally to be considered as an extreme view in opposition to that of the Sāṁkhya.

It is remarkable that there is not a single Nyāyasūtra of a convincing character which reproduces *verbatim* the corresponding text or part of the text of Nāgārjuna's Mādhyamika Sūtra. The few that seem to do so contain either the Siddhānta or the Dṛṣṭāntas which could have come down from an earlier period and repeated *verbatim* according to the general custom of Indian writers, who love to make anuvāda of an opponent's position in his own words, and, besides, show little disposition to vary the Dṛṣṭāntas[19]. Besides the very fact that in the parallels which Dr. Vidyābhūṣaṇa had cited there is often a difference of words without a difference of sense points to the conclusion

19 Of this we have numerous instances in the commentaries on the Trividha Anumana collected in this very paper (See *supra.*) I just happen to read the illustration मरीचि-उदक-चन्द्र in the Laṅkāvatāra. Is it contended that the Upaniṣad which contains the illustration of जलचन्द्र is posterior to Laṅkāvatāra?

that the author of the Sūtras had used some work of Mādhyamika philosophy other than the Mādhyamika Vṛtti of Nāgārjuna. Thus, for example, Nāgārjuna's 'गतं न गम्यते' etc. which Dr. Vidyābhūṣaṇa cites as the original of the Nyāya Sūtra 'वर्तमानाभावः पततः पतितपतितव्यकालोपपत्तेः' appears to me to be really not its original but only a parallel, the original being some other work earlier than both. Prof. Vidhuśekhara Bhaṭṭācārya has rightly observed : "Certainly Nāgārjuna established the Mādhyamika school. But it does not follow from it that all the materials for building the new structure were his own. He chiefly collected them from the works previous to him, such as the Prajñāpāramitā, Laṅkāvatāra, etc."

Now the Laṅkāvatāra itself clearly indicates that it is based upon older traditions of the Mādhyamika philosophy. The very mythological setting of the treatise, in which Buddha teaches the doctrine of Śūnyatā to Rāvaṇa, shows that the author wants the reader to accept the doctrine as an old heritage. Besides, it is clearly declared to have been taught by 'former Buddhas,'[20] which need not be taken literally, but which does point to a date long prior to the composition of the Laṅkāvatāra Sūtra. Besides, one of the passages of the Laṅkāvatāra shows that the doctrine of Kṣaṇikatā had been criticized before and the author had therefore to stand on his defence and explain what it really meant and what it did not mean. Thus, we read :

निर्व्यापारं क्षणिकं विविक्तं कायवर्जितम् ।
अनुत्पत्तिं च धर्माणां क्षणिकार्थं वदाम्यहम् ।
उत्पत्त्यनन्तरं भङ्गं न वै देशेमि बालिशाः ।

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20 लङ्कावतारसूत्रं वै वैबुद्धानुवर्णितम् ।

All this is not surprising if we remember that the doctrine of Kṣaṇikatā, Nairātmya or Śūnyatā, is of the very essence of Buddhism, and its logical representation must have been attempted centuries before the age of Nāgārjuna and Laṅkāvatāra Sūtra. The controversy of Sāssatavāda and Ucchedavāda is at least as old as Buddhism, perhaps even the Upaniṣads (see Bṛ. Up.); moreover, the very existence of a school of Buddhist thinkers who call themselves Sarvāstitvavādins (a sub-division of the Sthaviras and one of the primitive schools of Buddhism) implies that there existed a rival school who denied that " All exists ". This may be either the school of Vijñānavādins who held that "not all, but only a series of Vijñānas exists ", or those who denied existence to every thing, including even the Vijñānas[21].

We may therefore claim that the Buddhistic doctrines which are noticed in the Nyāya-Sūtras do not require us to believe that they belong to a period posterior to the Laṅkāvatāra Sūtra or the Mādhyamika Vṛtti.

We have completed our study of the Nyāya Sūtra I. i. 5. It has yielded very important results in *re* the date of Gotama's Sūtras, and the history of Indian Logic in the millenium following the age of Gautama Buddha ; and—what is of still greater importance—it has led us, in the humble opinion of this writer, to treat the date of Vātsyāyana as fixed by Dr. Jacobi and Dr. Vidyābhūṣaṇa as by no means a settled fact.

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21 The two doctrines were more or less inseparably bound up together, and even as late as the Nyāya Sūtra it is difficult to decide whether a particular adhikaraṇa contains a refutation of one or the other.

THE THEISM OF GAUTAMA, THE FOUNDER OF 'NYĀYA.'

By Ganganath Jha.

1. In the course of one's study of the Indian Philosophical systems, there is scarcely any subject more perplexing than that of Theism. The common belief is that the Pūrva-Mīmāṃsā is most orthodox and hence the most throughgoing protagonist of Theism; but every student of this system knows what position if any 'God' occupies in that system. To say nothing of *the* 'God,' the Creator of the Universe, the Mīmāṃsaka denies all gods, except as hypothetical entities, accepted only as necessary factors of the act of 'sacrifice'.

2. Then comes the Uttara-Mīmāṃsā, popularly known as 'Vedānta'; the place assigned to this system in the hierarchy of orthodoxy is next, if even so, to the Pūrva-Mīmāṃsā only. But here also, the exact position assigned to God is an interesting subject of study. He is not the creator, not the *nimitta-kāraṇa*, but the constituent cause, the Upādāna, of the Universe; and even so his position is lower than that of the highest Being, Para-Brahman.

3. The 'theism' of the two Mīmāṃsās however, notwithstanding the popular conception regarding it, has long been appraised at its true value by all serious students. The Mīmāṃsaka has long been stigmatised as 'atheistic', and Kumārila has had to make extra-ordinary efforts to bring it into the 'Āstikapatha' (vide

Ślokavārtika). The Vedāntin also has been openly called the 'pracchanna Bauddha', 'the hidden Buddhist.'

4. When we turn to the Nyāya, we find that, thanks to the two works of Udayanācārya, it still holds the field as the stoutest champion of orthodox 'Theism'. So far as the later works are concerned, there does not seem to be any doubt as to the fact that the Naiyāyika is the most thorough-going upholder of the view that the world is the creation of God.

5. What we are going to consider now is the exact position taken up on this subject by the founder of the Nyāya system. The Nyāya-sūtras, according to the Bhāṣya-kāra, are divided into three sections-*Uddēśa*, *Lakṣaṇa* and *Parīkṣā*. The Uddēśa of all categories is contained in the opening *sūtra*. In this *sūtra*, we find only the generic term '*pramēya*' 'object of cognition'; and the individual objects of cognition are *uddiṣṭa* mentioned, in *sūtra* 1. 1. 9, where we find the general term '*ātman*' ; and under *Sūtra* 1. 1. 10, as the *anumāpaka* or indicative, of the existence of the Ātman are mentioned, Desire, Aversion, Effort, Pleasure, Pain and Cognition. This is the *lakṣaṇa*' of 'Ātman'.

6. A full '*parīkṣā*' is contained under Sūtras 3. 1. 1. to 27. These 27 Sūtras are divided into 5 sections :—The first section proves 'Ātman' to be distinct from the sense-organs, the second proves it to be distinct from the Body; the third section deals with a side-issue; the fourth proves the Ātman to be different from *Manas* ; and the fifth proves that it is an eternal entity.

7. There is no mention in all this of any such division as into 'Jīvātman' and 'Paramātman'.

8. When we come to the Fourth Adhyāya, we find the theistic view stated in unmistakable terms in Sūtra 4. 1. 19, which says—'God is the cause, because the action of man is found to be fruitless.'

9. This would appear to clinch the whole discussion regarding Gautama's position. But on closer scrutiny we find that this theistic doctrine has been put forward among 'the views of prāvādukas', says the Bhāṣyakāra, according to whom, therefore the Sūtra does not represent Gautama's own view. It is in fact preceded by the much-maligned and ill-understood Śūnyavāda' doctrine, which is dealt with under, Sūtras 4. 1. 14 to 18.

10. It is only when we come to read the *Vārtika* that we find that the peculiarity of the position was realised. And it is no wonder; since it was the author of the Vārtika who had to guard the Nyāya against the attacks of '*Kūtārkikas*', *i. e.* atheists. He has therefore, with a view to show that the doctrine of Theism is not meant by Gautama to be relegated entirely to the circle of '*prāvādukānām dṛṣṭayaḥ*', construed the words of the Bhāṣya-'Ataḥ param prāvādukānām dṛṣṭayaḥ pradarśyante'-by adding the tell-tale words-*Kānicit pratiṣidhyante Kānicidabhyanujñāyante*', 'some of the views are negatived and some are accepted'; evidently the doctrine set forth in Sūtra 4. 1. 19 regarding 'God' being the 'cause', being the only one that is 'accepted.'

11. A study of the commentators however sheds a lurid light upon this device of the Vārtikakāra; and shows how hopelessly confused is the entire attempt to fasten this doctrine on Gautama. According to the

Bhāṣya, the Vārtika and Viśvanātha's Vṛtti, Sūtra 19 'God is the Cause' represents the view of the Sūtrakāra himself; this is objected to by the opponent who says (Sūtra 20)-'If God were the Cause, and not man's action, then results would follow, even in the absence of any act of man';-and this is rebutted by Sūtra 21, which says that the act of man is helped, in its fruition, by God.

12. As this appeared to be inconsistent with the words of the Bhāṣya introducing the doctrine as 'prāvādukānām' view, the *Tātparya* takes the entire section as levelled against the Vedāntic conception of God being the constituent or material cause of the world. According to this explanation, Sūtra 19-'God is the Cause' sets forth the Vedānta view, that God is the material cause, and this is rebutted in Sūtra 20, and the Nyāya view-that God is the *Nimitta-kāraṇa*-is set forth in Sūtra 21. This interpretation by the *Tātparya* has been supported by the *Pariśuddhi*, which remarks that Sūtra 19 must be taken as referring to the 'material cause', because the preceding section has dealt with the question of that cause. Vardhamāna also has accepted this same explanation. Viśvanātha is hopelessly confused in his attempt at grappling with the difficulty.

13. The very fact of 'man's action' being set up as an antithesis to the 'agency of God', would seem to indicate that what the Sūtra is thinking of is the *nimitta*, and not the *Upādāna, Kāraṇa*.

14. The commentators are fully agreed regarding the final siddhānta of the Nyāya being that God is the *nimittakāraṇa*. All that we mean to show is that there is no unanimity among them regarding the exact

bearing of the *Sūtras*; and it is highly significant that there should be this want of unanimity regarding the vital point.

15. It is to be notd that the doctrine of Theism has found no mention anywhere in the sections that contain Gautama's statement of his own views, and that it has been found sandwiched among avowedly heterodox doctrines; and has therefore called forth all the ingenuity of all the later commentators, from the *Vārtika-kāra* downwards.

16. Incidentally we may note also that according to the Vārtikakāra, there is no such thing as सर्गादि, 'beginning of creation'. He says clearly on p. 445 (Bib. Ind. Edition), '*Sargāderana-bhyupagamāt*,' and again on p. 466, '*ādēranabhyupagamāt*.' If there is no *ādi*, beginning, of *creation* (sarga), what would be the meaning of God being its *nimittakāraṇa*?

17. From the above it would appear that the conception of God as the 'Creator' of the world did not form part of the philosophy as propounded by Gautama; and perhaps it was on account of the heretics having taken advantage of this fact that Gautama's followers had to put forth strenuous efforts to base their theism upon Gautama's words and to prop it up by means of subtle reasonings; so much so that they have come to be looked upon as the doughtiest champions of the Theistic faith.

LOGIC

IN THE PHILOSOPHICAL SYSTEMS

OF ŚAṄKARĀCĀRYA AND ARISTOTLE

BY R. ZIMMERMANN, S. J.

The enquiry into the Logic in the systems of Śaṅkarācārya and Aristotle comprises three questions:

(1) What do Aristotle and Śaṅkarācārya understand by Logic?

(2) What is the system of Logic, either expressly taught or implied in the two philosophies?

(3) In what relation does Logic stand to the other main heads of the two philosophical systems?

I. The notion of Logic in Śaṅkara and Aristotle.

To observe the chronological order, Aristotle's notion and definition may be considered first. Nowhere in Aristotle is there a clean cut definition of Logic to be found. It has to be derived from the division of philosophy and the system of Logic itself which Aristotle propounds in the "Organon". There can, however, be little doubt that he understands by Logic the science of correct thinking, or the science of those laws of thinking by which reason has to be governed to preserve the right order in its functions. Etymologically, Logic is the science of the λόγος meaning in Aristotle tongue, speech, language, in the first place; it signifies, secondly, the notions and thoughts, expressed by words and speech (वाच्यार्थ); thirdly it indicates the faculty of thinking and reasoning. Both from the etymological meaning and from a consideration of Aristotle's system of Logic, it is clear that

his system of this science comprised the so-called formal logic, moreover epistemology or criteriology, and finally methodology. For, in his logical writings the philosopher analyses the process of thinking, inquires into its forms and functions by defining its various elements and means, concept, judgment and conclusion. Then he examines the validity of the general principles and states their application to the reality, affirming that thought is but the representation of the reality in its various degrees. Finally he goes into the methods of the various sciences, seeing how far they merely apply to their object the general laws laid down by Logic. It is because Aristotle maintains that thought represents reality, that he cannot be considered as an exponent or follower of "formalistic" Logic, which makes the laws of thinking its object to such an extent that it neglects the contents of thought altogether. The real end and aim of Logic, to find the truth, is shaped by the general tendency of the human mind towards the truth. This tendency has been given by no one better expression than by Aristotle himself in the classical words with which he opens his treatise on Metaphysics, and it permeates the whole system of the Stagirite in such a manner that his Logic receives its right to be from the desire to know, *viz.*, the truth.

Though the beginnings of philosophical thought may have been very much the same in ancient India and Greece, yet the development of it apparently did not march along the same lines. In India specialisation of the various branches of knowledge was soon adopted to such an extent that the organic connection between the different sciences was lost at a comparatively early date. These branches, instead of forming

one organic body of thought, had each one and the same purpose, the explanation of the great questions about God, the World, our own Soul and its functions. The two Mīmāṁsakās, as well as Nyāya and Vaiśeṣika, and not less than Sāṁkhya and Yoga, pretended to solve these questions in harmony with the Śruti. In the beginning, then, they were all centred round the Śruti, but it must be accepted as an historical fact that these sciences of exegesis did not, according to their own natural character and purpose, develop into branches of the one great philosophical system based on Śruti, subordinate as we might expect, but they grew into various independent systems, co-ordinate to one another.

The reason for the mutual independence of Logic from Metaphysics, for instance, is therefore to be sought in the position which philosophy occupied at the beginning : each of these philosophical branches were like Vedāṅgas, immediately connected with the traditional teaching of the Śruti which they undertook to interpret. And now Logic, for instance, instead of combining with some other branch of philosophy, Metaphysics, *e.g.*, developed into a complete system, supposed to lead as well as any other to the desired goal of all philosophy. This goal was the Mukti, Liberation, in later times, in earlier periods simply the answer to the many whys? and hows ? any thinking man would ask the Śruti and its exponents. It might thus be in keeping with modern notions, but unhistorical in this case, to look in the system of Nyāya for completely developed Metaphysics and, *vice versa*, in Vedānta for a systematic exposition of Logic. Nor is it surprising at all, if in all Śaṅkara's writings nowhere a binding definition of Logic may be discovered. But

it is quite certain that a head so clear as that of Śaṅkarācārya's had a very definite notion of Logic and knew its limits and its functions in philosophy right well. For Saṅkara, not less than for Aristotle, Logic is the science of correct thinking, or the science of those laws of thinking by which reason has to be guided to preserve the proper order in its activities.

There is, however, one great difference between the two philosophers. In Aristotle's system reason is the supreme arbiter in all questions before the court of human enquiry, whether it deals with established facts of the outside world, or the inner psychological life of Man, or even tries to penetrate the depths of the other world, and attempts to dive into the divine Essence and Life. Not so in Śaṅkarācārya's system. It is declared in so many words that Logic has to recognise a court of appeal set up in Śruti. The range of Logic appears thus limited in Śaṅkarācārya's system. It is of little avail to say that the final authority, the *anubhava*, is again independent of Śruti. Anubhava as a psychological act may be independent of Śruti, but not independent are the contents of the act which are furnished by Śruti. These points of difference between Aristotle's and Śaṅkara's system are then to be registered:—Śaṅkara has not developed like Aristotle a scientifically logical system which could serve as an infallible guide in all the other chapters of his philosophy. Second, he allowed Logic only a limited field of highest and final authority in the most important questions. If it clashes with Śruti, human reason, though it may work according to the laws of Logic, is no more credited with sufficient light to be a sure guide to the desired goal, the ultimate truth.

II.—The system of Logic.

To begin with Aristotle. His system of Logic is expounded in the so-called "Organon", the instrument of investigation and knowledge. The Organon comprises Κατηγορίαι which treat of the fundamental forms of "affirmations concerning the existent". The short essay Περὶ Ἑρμηνείας analyses the proposition and logical judgment ; the Ἀναλυτικὰ Πρότερα examine the syllogism; the Ἀναλυτικὰ Ὕστερα give the philosopher's view on proof, the definition of a thing, the division of things and of theii concepts and the cognition of principles. The Τοπικά treat of the dialectal or examining inferences, arising from probable assumptions. The fallacies of the Sophists and their exposure are the subject-matter of the Περὶ σοφιστικῶν ἐλέγχων.

These works form as many chapters in the whole system of Aristotelean Logic. First, there is the ontological order to be classified. Whatever may be attitude of the cognising mind towards its object, and whatever may be the reality of Being : that object and that Being will appear as something outside the mind, and will always appear as something definite. Hence the need of dividing Being and classifying the division. These divisions of Being form the Aristotelean categories. They, in their turn, form the contents of the notions, the concepts, which represent the outside world accurately. The categories are ten in all :—(1) substance: man ; (2) quantity: two miles long ; (3) quality: white ; (4) relation : double, greater ; (5) place : at sea; (6) time : now ; (7) position: lies; (8) possession: armed; (9) action: burns; (10) passion: is cut. That the contents of thought and the forms of speech correspond with the forms of Being is expressly stated by Aristotle. And as both the concepts and

the forms of speech are alike based on the forms of existence, they correspond themselves with each other. Naturally then, the objective concepts as well as the forms of thought and speech are considered and examined by Aristotle in their relation to reality. Thus substance as category denotes the substantial and the independent ; it denotes also the essential. The essential makes up the contents of the concept—Λόγος—and is the logical parallel to the ontological thing outside. The most outstanding feature of the substance is its independence from another substratum in which it might inhere, and the power of expressing the thing determined and circumscribed. For the substance, more than anything else, makes the thing to be what it is.—All the other categories are Συμβεβηκότα, accidents. They denote anything that is extraneous to the bare essence of a thing and not essentially included in its concept. There are accidents that necessarily are connected with the essential ; such an accident is the equation of all the angles of a triangle with two right angles. Other determinations, like colour, are merely accidental.

The combination of concepts, formed and circumscribed according to the objective categories, is the judgment, the expression of which is done through the proposition. The proposition is either affirmative or negative; both are either true or false. Truth in Aristotle is, as has been stated above, nothing but the agreement of knowledge with reality. Now as every proposition is either true or false, the principles of contradiction and of the excluded third or middle follow as a matter of course. Therefore, "of the affirmation and the negation of the same thing the one is always false, the other true." And " between the two terms of con-

tradiction there is no mean; it is necessary either to affirm or to deny every predicate of every subject." Or, if we apply these principles to the notion of existence and non-existence in one and the same thing it follows that "affirming non-existence of the existent, or existence of the non-existent, is falsehood; but affirming existence of the existent, and non-existence of the non-existent, is truth".

According to Aristotle a conclusion may be drawn from certain premises, and through their force; this conclusion is supposed to be different from the premises. This form of ratiocination is called syllogism, the typical form for "reasoning out", or deduction. Aristotle's terms for induction is Ἐπαγωγὴ which suggests a drawing up of individual cases in lines, like troops. Only the complete induction according to him is a strictly scientific induction; the incomplete induction, combined with a syllogism sub-joined, results in the analogical inference. Needless to say that sense-perception is recognised by Aristotle as a source of truth, since he builds his whole system on external experience as well as on the functions of reason. Human knowledge with Aristotle has as boundary line the individual (substance) on the one side, and the most general and universal on the other. The most general principles cannot be proved; hence universal truths or maxims have to be admitted as immediately certain. These ultimate principles—ἀρχαι—are the object of the intellect—νοῦς—they form an infallible source of knowledge. And as psychology is with the Stagirite a large field of enquiry, it goes without saying, too, that he acknowledges the internal testimony of our own consciousness as an independent source and criterion of truth. From his whole treatise on

Rhetoric, as well as from remarks made incidentally to the exposition of the syllogism, it is clear, finally, that Aristotle recognises the testimony of others, written or spoken, as a reliable source of truth.

The points of paramount importance in Aristotle's Logic may be summed up as follows:—

(1) Concepts and thought of the human mind correspond to the outside world; (2) concepts and thoughts are transmitted to the mind by (five) sources of knowledge, which are, at the same time, the criteria of truth; (3) these criteria can under no circumstances contradict or nullify each other; for truth is only one, and one and the same thing cannot be true and false at the same time.

In treating of Śaṅkarācārya's Logic there is, at the outset, the fallacy to be avoided of thinking that Śaṅkara's Logic might be worse than Aristotle's, because it is not such a systematic structure with the same clear features as that of Aristotle. Nor would it be correct to assume that certain tenets are not recognised by Śaṅkara, because they are not mentioned in so many expressed words. A logical maxim or law may not be mentioned by any of the three score passages in Śaṅkara's Brahmasūtrabhāṣya which treat of, or touch upon, Logic: yet it may all the same be a working principle with him and he may build momentous conclusions on it. The only safe way is to construct Śaṅkara's system of Logic in outline both from his direct utterances and from his whole philosophy as far as it supposes and embodies his views on the laws of thinking.

From the external shape of Śaṅkara's Logic it follows at once as a matter of course that it is in no

way a "formalistic" one, which merely considers the functions and laws of thinking as such, neglecting the contents of the thought. On the contrary, Śaṅkara's Logic is mainly epistemology and methodology, subservient to his higher ends of finding the truth and gaining *mokṣa*. Śaṅkara cannot be considered as an idealist either, in the unrestricted sense of the word, though his ultimate assertions may justify such a name to a large extent. Again, though certain tenets of his might countenance the suspicion that he was a sceptic, yet he uses reason to such a degree in building up his system that the term sceptic would become something very short of a misnomer. For, there can be little doubt that Śaṅkara not only believes in the theoretical capability of the human mind to attain the truth ; he also holds that, the necessary conditions on the part of the cognising subject and the object of cognition being fulfilled, the mind is actually in possession of truth. With Śaṅkara, too, truth is but the adequation of the cognising faculty to the reality. This definition of truth holds good in the पारमार्थिका अवस्था neither more nor less than in the व्यावहारिका अवस्था ; the objective reality, whatever that may be, is the प्रमाणम्, the mind is the प्रमेयम्. Śaṅkara went on holding this view on the mind and its object in face of his theory of the unreality of the world which goes against the plain, matter-of-fact view and the testimony of the majority of the sources and criteria of knowledge.

Unlike Aristotle, Śaṅkara does not seem to have aimed at a classification of the things that are the objects of perception and the basis of human thought. This was not so necessary for him as for the Greek philosopher, a good deal of whose labour was to be spent among the material things of this world into

which he carried his system of classification for purposes of science. Nor did Śaṅkara possibly even think such a classification worth his trouble, his one great end being to lead from the "unreal" world over to the only Reality along the shortest possible route. सत् or असत्, was for ever the great question with Śaṅkarācārya. Having once declared the appearance of individuals and the plurality of Beings as an illusion, it was not worth while any more to enquire what was the carrier of the erroneous illusion, and how it was clothed : in other words, the question of substance and accident waned into insignificence.

As to the sources of concept and thought, it is a well known fact that Śaṅkara recognises प्रत्यक्ष, अनुमान, उपमान, शब्द as sources of knowledge. It is obvious that they correspond--details of external form left apart--to Aristotle's sense-perception, syllogism, analogical inference, and testimony of authority. The शब्दार्थापत्ति and अनुपलब्धि, also recognised by Śaṅkara, have no parallels in Aristotle's Logic as independent sources of knowledge and criteria of truth. But there is one प्रमाणम्, though usually not mentioned by Indian writers as such, that unquestionably has not only been accepted by Śaṅkara, but, as a matter of fact, has been made the criterion of the परा विद्या, and which accomplishes nothing less than the transference of the अज्ञानिन् into the पारमार्थिका अवस्था. This most important प्रमाणम् is the अनुभव which has its accurate logical pendant in the (testimony of) consciousness, recognised and largely made use of by the Stagirite.

So far the logical concepts and their applications are essentially the same with the two philosophers. The differences to be registered are of such minor importance that they could not substantially affect their

whole systems. So it seems. There arises then the problem, how can on substantially the same logical basis the one philosopher rear his system of pantheistic monism, and the other a system of dualism? The ways of the two thinkers part in their concept of Being, and second in their application of the criteria of truth. The two steps are not independent of each other. For Aristotle, as we have seen, the principle of contradiction, and consequently the principle of the excluded third or middle is an universal axiom that does not suffer any exception whatever. "The same thing cannot at the same time and in the same respect belong and not belong to the same thing." It is a categorical Either Or which Aristotle here professes. Śaṅkara, on the other hand, feels no hesitation in postulating a middle term between the two contradictories, when he defines the objective Māyā as सदसदनिर्वचनीयम्.

As the principle of contradiction sustains thus a breach in the very first concept, that of Being, it is small wonder that the ontological foundation of the *Śaṅkaramata* becomes diametrically opposed to that of Aristotle. This exception from the principle of contradiction once accepted, the theory of Māyā, in the subjective and objective sense, loses its grotesque character. Śaṅkara cannot in earnest be taken to task for using a double standard of truth, the one set by the प्रत्यक्षादीनि the other by Śruti, and realised and individually appropriated by means of the अनुभव. The distinction between the सगुणा and निर्गुणा विद्या may not be backed up by the Bādarāyaṇabrahmasūtrāṇi; Śaṅkara is free to confess to them as a bold innovation of his own or his predecessors' genius.

There then lies the greatest difference between

the two logical systems of Śaṅkara and Aristotle :— Śaṅkara splits the concept of Being into two ; he postulates something between existence and non-existence, affirming contradictory predicates of the offshoot and, naturally, confessing its inexpressibility. With Aristotle Being either is or is not ; there is no third or mean between them. Consequent upon this, Aristotle has only one standard of truth and only one system of reality : absolute unity pervades the realms of the subjective and objective worlds.

III. The Relation of Logic to the other philosophical disciplines.

The position of logic is marked out by the general aim of that particular system of which Logic forms part, and by the main divisions into which that system is divided. As for the aim of Aristotle's philosophy, the student is not in the least left in the dark. The Greek philosopher observed the facts, analysed and classified them, drew from them his conclusions, and constructed his theories in that direction in which the ascertained data pointed. All through, the desire to know stimulated the investigator and, with an acumen unique for his time and for centuries to come, he based his doctrines on the World, its constitution and origin, on Man, and on God on the actual, observed state of things. Thus the Aristotelean system fully deserves the name of Realism. Never perhaps in all history of philosophy did a thinker start with less preconceived ideas, and very rarely, indeed, did a philosopher more carry his observations into his speculations ; and it would be difficult to find anyone who built his system with more consistency both on his observations and speculations. In fact, Logic and its laws, extracted from, and in harmony with, the reality, speaks the

final verdict equally in the plainest and the most sublime questions. If the laws of thinking permitted, a conclusion was accepted; but no theory, however tempting in itself, and apparently unavoidable either from a theoretical or practical point of view, was admitted that could not stand the test of rigid Logic.

A consideration of the division of philosophy, as proposed by Aristotle, gives the same impression on the importance of Logic. He divides philosophy very much in the same way as Plato when he says:- "Philosophical problems and theorems are either ethical, physical, or logical". The logical theorems are those that have a general bearing on all subjects. They are not specifically physical or ethical, but universal, and as such reach all things, including metaphysical questions in particular. It is true, this arrangement seems to have been only a provisional one; Aristotle's real division of philosophy is a distinction between practical, poetical (creative), and theoretical knowledge. As Logic has no distinct place in this division, it seems Aristotle considered it as a merely preparatory doctrine, though theoretical knowledge occupies the first place among the rest. In Metaphysics IV. 3 he points out the necessity of knowing Logic before studying Metaphysics. This, indeed, would seem to make Logic a propaedeutic science only to Metaphysics, if it would not actually include Logic in Metaphysics as a formal introduction. Since, however, Logic is the right method of thinking, not only in Metaphysics, but in all philosophical disciplines, it is beyond doubt that Logic occupies the same position of a *conditio sine qua non* with reference to Ethics and Physics, in short to the whole philosophy, as it does to Metaphysics. This view that Logic is a propaedeutic discipline has not impaired in the least the strictly scientific and methodic

character of Aristotle's logical system. On the contrary, because he made weal and woe of his whole philosophy depend on Logic, he created such a perfect system of that science that rightly he is called the founder of scientific Logic in the West.

Turning to Śaṅkarācārya, we find that the position of Logic in his system, too, is fixed both by the general aim of his philosophy and by the distinction between the various disciplines that is either actually or at least virtually to be seen in his writings. For Śaṅkara, not less than for any of the great thinkers of ancient India, philosophy had to perform the grand task of liberation. And now Śaṅkara's position is marked off from that of most of his rivals in India and a good many illustrious names outside India by his doctrine that liberation from the dreadful bondage of migration is brought about by the intellect and its highest function, the proper knowledge, the ज्ञान par excellence. It cannot be denied that at first sight there seems to be an inconsistency in this that the bondage is effected by कर्म, action, both of will and body ; the liberation from it, on the other hand, is accomplished by the intellect and its activity. But it must not be left out of sight that even the संसार and all its causes and consequences are, as a matter of fact, the effect of ignorance, अज्ञान. Thus it is on the part of Śaṅkara not at all illogical to say that will and action may change the course of the transmigration, but true knowledge alone can do away with it. Thus the highest principle in Śaṅkara's philosophy is the λόγος in the sense of the faculty and its acts.

The question now arises, does this principle of liberation act according to fixed, unalterable laws? The exercise of the cognising faculty which leades to

redemption is the अनुभव, self-realisation. This anubhava must be prepared by action, teaching, self-concentrating meditation, etc.; but how, when, why, it actually will take place is beyond all control. If it comes to the अज्ञानिन्, well and good, if it tarries, it cannot be forced. There is no कार्यकारणभाव between anubhava and any of its antecedents, no infallible means to bring it about in a definite manner and at a certain time. The conclusion, then, would seem unavoidable that the Vedānta of Śaṅkara raises knowledge, a logical principle to the highest possible dignity, yet he lowers it as a philosophical and scientific principle by removing it from the control such a principle is necessarily subject to.

The main heads of Śaṅkara's doctrine are summed up in the śloka :—ब्रह्म सत्यं जगन्मिथ्या जीवो ब्रह्मैव नापरः । which amounts to the assertion of the (only) reality of the Supreme ontological Principle, the unreality of the (outside) world, and the identity between the human soul and the Supreme Principle. It is hardly justifiable to say that Logic occupies the position of a propaedeutic science in this division, as it does in Aristotle's philosophy. With Śaṅkara, Logic is only in a restricted sense the necessary supposition for the rest of philosophy. In his system it is not the universal logical maxim and principle that is without exception. If Logic runs counter to the ultimate thesis, All is brahman, then Logic has to end, its means are declared invalid and misleading and theories like that of the अध्यास are put forward to explain the contradiction. Thus there results the paradox that in Śaṅkara's sytem of philosophy for the sake of logical consistency Logic itself is set at nought.

ORIGIN OF INDIAN ALPHABET.

BY D. R. BHANDARKAR.

All the earliest inscriptions found in this country have been engraved in two different scripts or *lipis*,--one called Brāhmī which was written from left to right as in all Hindu scripts of the modern day and the other called Kharoṣṭhī which was written from right to left as in Persian or Arabic. The latter flourished in the north-west part of India only, whereas the former was in vogue all over India, including the small region where the Kharoṣṭhī was written. Again, the Kharoṣṭhī died a natural death before the 4th century A. D., whereas the Brāhmī has been recognised to be the parent of all the scripts indigenous not only to India but also to Ceylon, Burma and Tibet. The foreign origin of the former has never been called in question, but the same has not yet been definitively established of the latter. Besides, the Brâhmī is admitted to have been framed by phonologists for writing Sanskrit and Sanskritic languages. The Brāhmī has thus been rightly looked upon as the real ancient alphabet of India. When, therefore, the origin of the Indian alphabet is the subject of discussion, the origin of the Brāhmī alone is understood.

Numerous and diverse are the views propounded of the origin of the Indian alphabet. They may, however, be reduced to three main theories. The first is that originally suggested by Prinsep who first unravelled the enigma of the Brāhmī *lipi*. He was in-

clined to ascribe the alphabet of Aśoka inscriptions to the Greek source. In this view he was followed by Otfried Müller and sometime after even by Senart[1]. There can be no doubt that there is a great resemblance between the Greek and the earliest Brāhmī characters. But it is beset by insuperable difficulties based chiefly on grounds of chronology. Nobody now believes that the Brāhmī *lipi* originated in the Aśoka period. This view consequently has long since been rejected. The second theory we have to consider is that which regards the Indian Alphabet as having an indigenous origin. It was first suggested by Lassen and afterwards countenanced by Edward Thomas who thought it to be an invention of the Dravidian races of Southern India. This theory in somewhat recent times found an able supporter in Sir Alexander Cunningham who made a regular attempt to derive it from a primitive Indian picture-writing[2]. Cunningham was followed by Dowson who maintained more emphatically that the Indian alphabet was an independent invention. The third theory is that of Semitic orgin. It is upheld by a good many palaeographists, and is now in the ascendant. It was originally put forward as early as 1806 by Sir William Jones. Of the advocates of this theory two main classes are at present recognised. The foremost of one class are Deecke and Issac Taylor[3] who hold that the Indian alphabet is derived from that of the Southern Semites in South Arabia, and, of the other are Weber and Bühler[4] who maintain that it is derived directly from that of the Northern Semites, the earliest Phoeni-

1 Isaac Taylor, *The Alphabet*, II. 304

2 CII., I. 52.

3 *The Alphabet*, II, 314 & ff.

4 *Ind. Studies*, III. 53 & ff.

cian alphabet known to us from the long epigraphic document of Mesha, king of Moab, the oldest Sinjirli inscription and certain characters engraved on the Assyrian Weights, which all have been supposed to be of about B. C. 850. The adherents of the latter view are now so numerous that it has become the accepted doctrine of all experts in Indian palaeography. This theory of the Phoenician origin of the Indian Alphabet was no doubt first propounded by Weber but the credit of establishing it on a firmer basis certainly goes to Bühler. It was he who brought all his scholarship and his expert knowledge of Indian epigraphy to bear upon the subject and has done real service to the cause of palaeography in establishing some conclusions which are even now unassailable. One of the strongest arguments urged by Cunningham and Thomas in rejecting a Semitic origin for the old Alphabet of India is the difference in the direction of the writing. All the epigraphic records of ancient India run from left to right whereas those of the Semitic races from right to left. Unless, therfore, it was proved that the Indians wrote from right to left it was impossible to adhere to any theory of Semitic origin. In other words, before any scholar can hope to propound the theory that the Brāhmī is derived from a Semitic alphabet, he has to prove in the first place that Brāhmī was at any time written from right to left like Semitic scripts and not from left to right as is generally known to us,—a point on which Cunningham and Thomas laid so much stress. And it must now be acknowledged that the adherents of the thoery of the Semitic origin have now clearly demonstrated that even the Brāhmī *lipi* was originally written from right to left. Thus

Bühler has drawn our attention to the fact that the legend on a coin, originally found by Cunningham at Eran but now deposited in the British Museum, consists of letters which not only have to be read from right to left but are also each reversed[5]. He has further shown that even in Aśoka's edicts single letters such as *dh*, *t* and *o* are sometimes found reversed, no doubt a reminiscence of the writing from right to left. Further such reminiscences have been pointed out by Mr. Wickremasinghe, the learned Editor of the *Epigraphia Zelynica.* The students of Aśoka's inscriptions are aware of the rather peculiar way in which the conjunct consonants are engraved. Conjunct consonants, it need scarcely be stated, must be so written as to follow the order in the pronunciation of its sounds. And when a script is written from left to right as we do at present, the letter *t* must come above *p* in the conjunct consonant *tpa*, *s* above *t* in *sta*, *v* above *y* in *vya*. But what do we find in Aśoka's edicts? As a rule the letter that is pronounced first is placed below and not above the second letter. Such a reversal of the process is possible only in the mode of writing from right to left. The compound-letters of his inscriptions clearly show that the writing of Aśoka's period was still to a large extent influenced by the old long-settled system of reading from right to left[6]. But Aśoka's incriptions are not the only instances of this kind. Mr. Wickramesinghe has informed us that in Ceylon have been discovered scores of inscriptions whose characters are in several instances cut reversely or which have actually to be read from right

5 *Ind. Studies,* III. 44-5.
6 J. R. A. S., 1901, 302 & ff.

to left[7]. The important fact to note is that this anomaly is to be met with only in the most ancient inscriptions, *i.e.* in the Southern Asoka character, and that there is not a single epigraph of a later date, in Ceylon as in India, which reads from right to left or in which individual letters are reversely engraved. The evidence thus set forth is strong enough to show that long long anterior to Asoka the Brāhmi letters were written from right to left and in a reversed form but that shortly before his time people had commenced writing from left to right with the result that even in his time writing from right to left had not become completely extinct and that even in writings from left to right the reversed forms of single letters occasionally lingered both in India and Ceylon. An exactly analogous case has been furnished by the earliest Greek alphabet called the Cadmean alphabet[8]. From the island of Thera, now called Santorin, have been obtained upwards of twenty inscriptions extending over two or three centuries. The latest have been written from left to right in a Greek alphabet approaching to the Abu Simel type, but the earliest are engraved from right to left and in reversed Greek characters thus resembling letters of Phoenician style. What thus happened in the case of the Greek alphabet must doubtless have happened in the case of the Brāmhī *lipi* also. Thus the argument that the ancient alphabet of India always ran from left to right which was urged by Cunningham and Thomas against its foreign origin was completely demolished by the evidence adduced by Būhler and Mr. Wickramesinghe. There, however, remained the third vehement advocate of the theory

7 Ibid., 1895, 896-7.
8 Issac Taylor, *The Alphabet*, II. 28 & ff.

of indigenous origin. *viz*: Dowson[9], who boldly challenged his adversaries "to show whence it came" if the Indian alphabet was a foreign importation, no sufficient resemblance between the Brāhmī character and any class of Semitic alphabet being till then established. Then came Isaac Taylor[10] who first made a systematic attempt at showing a close correspondence between the Brāhmī and the Sabean alphabet of Arabic Felix. And he was soon followed by Bühler who showed the still closer correspondence of the Brāhmī with the alphabet of the Northern Semites thus demonstrating as he thought the correctness of the hypothesis which Weber originally put forth but could not prove owing to the lack of materials when he wrote[11]. Bühler went further and showed that the theory of a South-semitic origin of the Brāhmī alphabet was untenable, because the resemblance of character between the two pointed out by its advocates was often fanciful and assumed most extraordinary changes in the phonetic value of the signs, especially when Hindus had always been very particular, nay pedantic, in matters connected with phonetics. On the other hand Bühler's theory was not free from an element of doubt, to which Prof. Rhys Davids was the first to draw our attention[12]. Direct intercourse between India and South Arabia along the coast was at least possible, though not probable in the 6th or 7th century B.C. So that it is at least possible, on this ground, to trace the source of the Brāhmī *lipi* to South Arabia though on other grounds it is untenable, as Bühler has shown.

9 J. R. A. S. (NS.), XIII, 112

10 *The Alphabet*, II. 318 & ff.

11 *Ind. Studies*, III. 54 & ff.

12 *Buddhist India*, 114

"But no one has yet contended that the Indians had any direct communication with the men who, on the borders of Palestine, inscribed the Mesa stone, where the resemblance is greater." Prof. Rhys Davids is, therefore, compelled to put forth the hypothesis that "Indian letters were derived, neither from the alphabet of the Northern, nor from that of the Southern Semites, but from that source from which these, in their turn had been derived—from the pre-Semitic form of writing used in the Euphrates Valley." Unfortunately, Prof. Rhys Davids has not shown what this "pre-Semitic form of writing used in the Euphrates Valley" is, whether there is any convincingly sufficient resemblance between it and the Brāhmī *lipi*, and at what period approximately it was transplanted into India. Unless some light is thrown on these points, his theory about the pre-Semitic form of writing is wholly conjectural, being unsupported by any known facts. It is this conjectural nature of his theory that, I am afraid, has prevented scholars from perceiving the flaw in Bühler's theory which Prof. Rhys Davids has correctly pointed out. Unless it is clearly shown that India had direct intercourse with the borders of Palestine in the 7th or 8th century B. C., what is the good of saying that the Brāhmī *lipi* is derived from the alphabet that was prevalent in that part of the World and at that period, as Bühler has no doubt done? Nevertheless, scholars have not taken cognisance of this glaring flaw so ably perceived by Prof. Rhys Davids, and have rather precipitately fallen in entirely with the views of Bühler. The triumph for the Semitic theory was thus complete, apparently at any rate, and continued to be so until three years ago when the prehistoric cairns in the Nizam's dominions were excavated

in Rajgir in the Nalgonda District. On cleaning the pottery dug out here, Mr. G. Yazdani, Superintendent of Archaeology, noticed peculiar marks on them, which in some cases were so faint that they would have escaped his notice, being mistaken for ordinary scratches but for the identity of one of them with a character of Brāhmī script which was fresh in his mind as he had then only recently finished his eye copies of the newly discovered Aśokan edict of Maski.[13] The identity impressed him ; and as he continued to wash and examine the pots, he found that every one of them was similarly marked. Similar marks had been noticed by the late Mr. Bruce Foote on the pre-historic pottery exhibited in the Madras Museum. Mr. Yazdani naturally visited this Museum, and personally and carefully examined all the pots and potsherds collected here from the fourteen districts of the Madras Presidency and the various sites of the Mysore and Travancore States. No less than one hundred and thirty one different marks was he able to notice, of which he prepared a diagram accompanied by a brief description of each pot. But this number he rightly regards as by no means final, as pottery from every fresh site may add to it, and, as a matter of fact, has since then added to it. It may be mentioned here in passing that the prehistoric pottery dug out in the Hyderabad cairns is associated with Megalithic structures which cannot be later than 1500 B. C. and that some of the pottery exhibited in the Madras Museum belongs to the Neolithic age [14], which cannot be posterior to 3000 B. C. What is, however, most noteworthy in this connection is that at least five of these marks are identical with the

13 *Jour. Hyder Arch. Soc.*, 1917, 57 & ff.
14 Ibid., 65-6, nos. 1 & 3.

letters of the earliest Brāhmī alphabet. Is it not possible that this script was after all derived not from any foreign but an Indian alphabet though of the pre-historic period? Fortunately for us this phenomenon is confined not to India only but is noticeable also in Europe. A large number of pebbles were discovered by M. Ed. Piette at Mas d'Azil, on the left bank of the Arize in France belonging to a stratum between the Palaeolithic and Neolithic Age. On some of these pebbles symbols resembling the capital letters of the alphabet have been found painted. Piette himself is inclined to see in these symbols the forerunners of the later syllabaries and alphabets of the East, nine of them agreeing with forms of the Cypriot syllabary and eleven with those of the Phoenician alphabet [15]. It is, therefore, perfectly reasonable to see, in the symbols on the pre-historic pottery of India, the forerunners of the characters constituting the Brāhmī *lipi*. If we now carefully examine the diagram of symbols prepared by Mr. Yazdani it must be admitted that some of them do look like pictograph or ideograms. But it cannot be denied that a fairly large number of these signs look like letters of an alphabet. Five of them, as has just been stated, are certainly identical with the characters of the earliest type of the Brāhmī *lipi*. No doubt, this number is very small, but this is just what might be expected. For how is it possible to expect a larger number of identical letters in alphabets which were separated by milleniums? Nor is it reasonable to doubt the identity of these letters precisely on the same ground. i.e. because these alphabets were divided by milleniums. For we know that some of the pre-historic symbols found in Egypt and referred to a period

15 *Encycl. Brit.*, I. 724; XXVIII. 852.

[F. O. C. II 40].

anterior to 5000 B.C. have been found to be identical with some of the alphabetic signs of the Phoenicians *e.g.*, which have been assigned to Circa 900 B.C.—showing thus an interval of four milleniums. Coming to our own country do we not find that the letter g *e.g.* of the inscription on the relic-casket of the Piprahwa Stūpa which may be ascribed to about 500 B.C. has survived in that exact form to this day in the modern Kanarese script ? Another reason why we have to consider some of these symbols to have an alphabetic value is that there seem to be signs even for expressing medial vowels (such as we see in Aśoka's time). Thus No. 3 in Mr. Yazdani's diagram seems to me clearly to be *go* i. e. *g* with the medial vowel O. And No. 13 is almost certainly *to*, the only difference being that the stroke indicating *o-kāra* is here attached not to the top but to the middle. An *i-kāra* also appears to have been expressed as in No. 10 for instance not, however, in the Brāhmī but in the Kharoṣṭhī fashion. Again, it is worthy of note that the diagram shows instances of reversed letters. Thus Nos. 4 and 5, 14 and 15, and 18 and 19 give symbols which are reversed or inverted forms of each other. These considerations are distinctly in favour of regarding some of the signs at any rate in the diagram as being alphabetic letters. The only argument that might be urged against this view is that there can be no earthly reason why single letters were scratched on these pots if we look upon these marks as alphabetic letters at all and that the only theory that appears plausible is that they are ownership marks. I am afraid I cannot agree to this theory. Because many of the signs in the diagrams are identical with the signs found elsewhere

outside India, on proto-historic and pre-historic antiquities *e.g.* in Egypt and Europe, and these latter have been proved to be alphabetic signs. Secondly, the custom of engraving a single letter which was also the initial letter of a name was by no means unknown to India. A typical case is furnished by Stūpa No. 3 at the well-known Sāñcī in the Bhopal State, Central India. Here two relic-caskets were found, the inner surfaces of whose lids bear, in one case, the letter *sa* and, in the other, the letter *ma*. If we had had merely these relic-caskets to go upon, I am sure the significance of these individual letters would not have been grasped, and they would have been thought to be mere ownership marks. But fortunately for us, they were found inside two boxes, apparently of ordinary stone, each incised with an inscription to the following purport and explaining the initials in one case, *Sāriputasa*, and in the other, *Mahā-Mogalānasa*[16]. Is it not thus clear that the single letters *sa* and *ma* of the relic-caskets stand for the initial letters of the names Sāriputta and Mogalāna? Precisely the same must have been the case with the individual letters scratched on the pre-historic pottery of India which, be it noted, has been found in burial or inhumation sites. If there is any scepticism still left on this point, it is completely dispelled, I think, by two neoliths lying in the collection of the pre-historic antiquities of the Indian Museum. The credit of perceiving their importance goes solely to Mr. Panchanan Mitra, who is perhaps the only Indian scholar of the pre-historic archaeology of India. While one day he was engaged upon inspecting the pre-historic artifacts in our Museum, he suddenly lighted upon these neoliths which he rightly inferred to be

16 Cunningham's *Bhilsa Topes*, 297—9, & pl. 22.

inscribed with some characters. He forthwith hastened to my office-room and placed them before me for examination. One of these was certainly a celt of greenish stone found in Assam. It bears apparently four letters, two of which are exactly and one almost exactly similar to those of the pre-historic character of Egypt as may be seen from a comparison to the table published by Dr. F. Petrie in a recent number of the *Scientia*[17]. And what is strange is that they have all been connected by one continuous line as in the prehistoric Minoan epigraphs. The other neolith came from a place near Ranchi and is a tiny piece of hematite stone shaped like the palm of the right hand. It is faintly scratched with three letters only, two of which bear fairly great resemblance to those of the Brāhmī *lipi* of the Aśoka period. These were the letters at the ends, one of which was *ma* and the other *ta*. The middle letter, as it stood, could not be read for a long time. Then it occurred to me that the letter *ta* was evidently in a reversed form and the other, viz. *ma*, must remain the same even when it is reversed. Might the middle letter similarly present a reversed form? I at once held the neolith before a mirror, and to my agreeable surprise I found that the middle letter came fairly close to the Aśokan *a*. As all the letters are reversed, the inscription has to be read from right to left and reads accordingly *ma-a-ta*. This neolith as has been stated above was found in Bihar where there are still some tribes with non-Aryan tongues, which are believed to furnish a key to the languages spoken by the predecessors of the Aryan conquerors of India. And as was pointed out by Mr. Mitra,[18] there is a word

17 XXIV. 440.

18 *Ind. Ant.*, XLVIII. 63-4.

Mahto or *Mahtou* in non-Aryan parlance, signifying 'a chief or headman' as is clear from Russell's *Tribes and Castes of the Central Provinces in India* and Risley's *Tribes and Castes of Bengal.* Could the *Ma-a-ta* of the neolith be equivalent to *mahto* or *mahtou*? Whatever the answer to this query may be, this much is certain that we have here two neoliths whose neolithic character is undisputed and which bear each, not one individual letter so that it may be thought to be an ownership mark but many letters, one containing three and the other four. No scepticism is, therefore, here possible as to these being alphabetic signs and not ownership marks—a conclusion which is further fortified by the fact that they bear resemblance to what we know to be the actual alphabetic characters. Thus the discussion about the origin of the Brâhmī alphabet is transferred from the historic to the pre-historic sphere. This is just as it should be, for even in Europe all Semitic and other alphabets are now being traced to the pre-historic times, and the view is gradually gaining strength that the alphabet originated with the pre-historic man. It is true that Dr. Petrie, the most celebrated Egyptologist of the modern day, thinks pre-historic Egypt to be the cradle of all alphabets because it presents the largest signary from which the Phoenicians and the Greeks borrowed as many signs as were necessary for their alphabetic purposes ; but I am afraid that this is by no means yet an incontrovertible conclusion, especially as pre-historic archaeology of India is still in its infancy ; and as its study develops as a science, pre-historic India may be found to yield a still larger signary which was drawn upon not only by the Aryans and later peoples of India but also by outsiders,—the Phoenicians, Greeks and even Egyptians. Hence at the present day, when

characters of the neolithic period have been found in India, if we still insist upon asserting that the ancient Brāhmī *lipi* is derived from the South-Semitic or North-Semitic character, why not then derive it from the present English alphabet? This may incline the reader to laugh. But I may mention in this connection that in 1905 when I was in Calcutta, a young intelligent Bengali scholar showed me a note in which he most ingeniously derived the old Brāhmī characters from the present English alphabetic letters by adopting precisely the same principles according to which Bühler derived them from the North-Semitic signs. And we know that a similar attempt has been but recently made by Pandit Gaurishankar Ojha of Ajmer.[19]. Of course, all alphabets are at present being traced to one alphabet, which, as I have just said, was invented in the pre-historic period. Hence it is no wonder even if an earlier alphabet can be derived from a later one. But what I emphatically assert is that when symbols of this pre-historic alphabet closely resembling some of the Brāhmī *lipi* are actually noticeable on the most ancient remains of the primitive man in India and cannot be later than 3000 B. C. but may be as early as 6000 B. C. it is absurd to trace the old Brāhmī *lipi* to any Semitic script of 700 B. C.

19 *Bhāratīya-prācīna-lipimālā*, 26.

A NOTE ON TILAKWĀDĀ COPPER-PLATE INSCRIPTION OF THE TIME OF KING BHOJA PARAMARA OF MĀLWĀ.

(Vikrama Saṃvat 1103)

BY

J. S. Kudalkar, M. A., LL. B., Baroda.

The inscription was brought to my notice in the summer of 1919 by a brother-officer of the State Mr. R. D. Korde, Abkari Depot Officer at Tilakwādā through his brother Mr. L. D. Korde, B. A., now Vahiwatdar at Karjan. The inscription was discovered in May 1917 at Tilakwādā in the bed of the river Narmadā at the spot called "Nānā Owārā," (smaller bathing Ghāt) near "Dhobi Shālā" (washerman's depot). It was found by a man of the Dhānka community, named Bhailā Nāthā (now dead), while he was swimming and diving in the waters of the Narmadā.

The *Plates* are two in number, the first measuring 8¾″ by 5½″ and the second 9″ by 5¼″. The plate at the beginning is missing and could not be discovered even after repeated efforts to find it out at or near about the former spot. The first plate is engraved on both the sides and the second on one side only, as the inscription ends on that side, thus leaving the outer side blank. Whether the missing plate was inscribed on only one side or on both cannot be known. The plates are in a perfect state of preservation, so that the reading of the text is nowhere doubtful. First plate front-side contains 12 lines of writing, first plate other side contains

10 lines and second plate contains 7 lines. In the upper part of the plate there is a hole in the centre for the ring. The *ring*, together with the *seal* if any, is missing and its loss accounts for the loss of the plate at the beginning. The weight of the two plates is about 2 lbs. The letters are clearly engraved and their average size is about ¼″ by ¼″. The *characters* are Nâgari of the 10th Century and the *language* is Sanskrit. The whole inscription is in verse. A few grammatical inaccuracies are to be noticed. As regards *orthography*, the dental sibilant is used instead of the palatal in several places and the palatal instead of the dental in two places.

The inscription is dated Vikrama Saṁvat 1103 (A. D. 1047) and is regarding the grant of a village, called "Viluhaja," along with a hundred (acres) of land from the neighbouring village of "Ghantāpallī for the temple of the deity Shri Ghaṇṭeśvara given by Shri Jaśorāja, son of Surāditya, probably a prince, feudatory to King Bhoja. The grant was given in the temple of Maneśvara, situated at the confluence of the river Manā and the Narmadā. The donee was a holy sage, by name Dinakara, and the inscription was written or engraved at the request of the King by a Kāyastha by name Sohika, son of Aivala of the family-name Vāla.

Now the details of the eulogy of the ancestors of King Bhoja are lost in the first missing plate. The second plate begins with the last quartet of the verse describing the immediate predecessors of Bhoja, who must have been Sindhurāja. Surāditya, the father of the donor, is described in the plate to have been an immigrant from Kanouj and to have rendered great help to King Bhoja by vanquishing the armies of his other rival princes, among whom one "Sāhavāhana"

is mentioned prominently. Now there is no doubt that this King Bhoja is no other than the famous Paramāra King Bhoja of Mālwā. According to Vincent A. Smith the Paramāra King Bhoja "reigned gloriously for more than forty years from about A. D. 1018 to 1060." With these dates the consensus of opinions of other scholars agrees with a few years' difference. Lionel D. Barnett, in his "Antiquities of India" gives A. D. 1010 as the year in which Bhoja succeeded his father Sindhurāja, the year in which Muhamud of Ghazni took Multan. Even accepting this date, the date of the present inscription (A. D. 1047) falls well within the long regime of King Bhoja, which, according to Barnett, terminated in 1055 when Jaysiṁha succeeded King Bhoja to the throne of Mālwā. The other King Bhoja II Parihāra or Pratihāra, of Kanouj, had a very short reign of three years from A. D. 908-910 ; and the period of nearly 140 years between this date and the date A. D. 1047 of the present inscription cannot be accounted for by only one generation from Surāditya to his son Jasorāja, the donor.

Now who is this "Sāhavāhana and the other King" whom Surāditya defeated and thereby "made Bhoja's royal glory stable"? V. A. Smith refers to "his (Bhoja's) fights with the neighbouring powers, including one of the Muhammadan armies of Mahammud of Ghazni. L. D. Barnett says that "he (Bhojadeva) carried on wars with Indra-ratha, Toggala (?), the kings of Chedi and Lāṭa, the Turushkas, the Chāhamānas of Nāḍol and the Western Chālukyas Jayasiṁha II. and Someshvara I. and overcame the Chaulukya, Bhīma-deva I." These references will explain the defeat of "other princes"; still the crux of the

inscription remains in the reference to " Sāhavāhana." The word " Sāhavāhana " cannot be a corruption of " Sātavāhana" which is another name of " Śālivāhana " ; for this dynasty of " Sātavāhanas " came to an end in A. D. 218 with the 30th King of the line, by name Pulomāvi IV. (See R. G. Bhandarkar's " Early History of the Dekkan," 2nd, ed. P. 36, and V. A. Smith's " Early History of India," 3rd ed., table facing page 218).

Who then is this King " Sāhavāhana " so prominently mentioned in our inscription ? Can he be one of the Turki " Sāhi " or " Shāhiya " kings, descendents of Kaniṣka, who ruled in Kābul till A. D. 870, when that city was captured by the Arab General Yakub-i-Lāis, and after that, shifted their capital to Ohind on the Indus, or is he a king of the dynasty founded by the Brahmin Lalliya, who overthrew the last of the Turki Shāhiya kings in the reign of Śaṅkarvarman of Kāshmir (A. D. 883-902) and whose dynasty, known as that of the Hindu Shāhiyas, lasted till A. D. 1021, when it was exterpated by the followers of Muhammud of Ghazni ? The history of this King " Sāhavāhana " would indeed throw a new light on the history of the time of King Bhoja Paramāra of Mālwā.

The other allusions in our inscription can be very well explained. Tilakwādā is the head-quarters of the small " Mahāl " of that name, which is almost a minor part of the other contiguous " Mahāl " of Sankheḍā in the Baroda Prānt of H. H. the Gaekwad's State-Saṁgamakheṭamaṇḍala" in the inscription is the present ' Sankhedā "–mahāl (= Sam-Kheda or Khetaka). At Tilakwādā there is the confluence of the rivers " Narmadā " and " Manā " or modern Menā or Menī. The temple of " Maṇeśvara " is the modern temple of " Maṇi-Nāgeśvara " of God Śiva. At a distance of

about 11 miles from Tilakwādā is a village by name "Ghantolī", which must be a corruption of our "Ghanṭāpalli" in the inscription, and about two miles from Ghantolī is a village named "Velpur" which must be the corrupted modern form of the village "Viluhaja" or "Viluhavė" mentioned in the inscription. "Ghantolī" is now a railway station on H. H. the Gaekwad's "Motipurā-Tankhālā line, which joins H. H. the Gaekwad's Dabhoi Railway at Chhuchhapur, station for the Motipurā mines. At Ghantoli there is still to be found the temple of Ghaṇṭeśvara in ruins. The reason why the copper-plates were found at Tilakwāḍā and not in the Ghaṇṭeśvara temple at Ghantoli is that after the holy water for the land-grant was offered to the sage Dinakara in the temple of Maṇeśvara at Tilakwādā, probably the plates remained in that very temple and when that old temple of Maṇeśvara was probably washed away by the waters of the Narmadā. the plates also must have been carried away in the waters and remained buried in the bed of the Narmadā, The present temple of Maṇi-Nāgeśvara at Tilākwādā seems from its modern appearance to have been built on or near about the ruins of the old temple of Maneśvara.

The donor, "Śrì Jasorāja", seems to be of a royal descent ; for his father Surāditya, who is said to have come from Kanouj and to have belonged to the family of "Śravaṇa-bhadra", is styled as "Narottama" (the best of men or a king). Then, while granting the land he called "sons of Amātya" and other prominent inhabitants to witness, which implies that he could command the "Minister's sons" to attend. Again, the writer of the plate is said to have inscribed it at the request of the "King", that is, probably Jasorāja

himself. At the time of the grant Jasorāja appears to have retired from life and to be leading a religious life on the banks of the Narmadā in Sankheḍā Tālukā.

[THE TEXT]

First plate (Obverse)

प्रापुः सखित्वन (म) चलं रिपवो दुरन्ताः ॥ तस्माद्बभूव भुवि विश्रुतकीर्तिपुंज
श्रीभोजदेव इति शत्रु (क ?) जनस्य दंडी । दग्धाः (?) प्रतापशिखिना रिपुयक्षसां
सि निःकंटकं किल चकार चिरेण राज्यं ॥ तत्पादक्रमलध्याता कन्यकुब्ज-
विनिश्रुतः । वंशे श्रवणभद्राणां सुरादित्यो नरा (रो) त्तमः ॥ साह्वाहनसंग्रामे
अन्येषामपि भूभुजां ॥ ह्त्वा योधां स्थिरां लक्ष्मीं भोजदेवे चकार यः ॥ एवं कुर्वन
(न्न) सौ क्षीणसुराणां धुरि वर्तिना । सुरादित्येति यन्नाम य (च्च ?) तस्य हि शो-
भते ॥ तत्पुत्र श्री जसोराज संगमखेटमंडले । भुंजन्वृत्तिं सदा धर्मी धर्मोया-
तितरां बभौ । आकार्यामात्यपुत्रा (त्रां) श्च प्रधानां देशवासिनः अनुमतिं प्रार्थ-
यामास विदितं वोपराक्रमं । सम्मतस्तै स्वधर्मेण गत्वा श्रीनर्मदातटे ।
वस (त्स) रैर्विक्रमादित्यैः शतैरेकादशैस्तथा ॥ त्र्युत्तरैर्मार्गमासेस्मि-
नसोमे सोमस्य पर्वणि । स्नात्वा गुरुरनुज्ञातः कृत्वादेवच्च (वार्च) नादिकान् ॥
मणाया सङ्गमे रम्ये मणेश्वर सिवालये । दक्षिणमूर्ति सिवेन मार्गे—

(Reverse)

णोदकपूर्वकं ॥ श्रीघण्टेश्वरदेवाय ग्रामं चिलुह्ज (?) ददौ । घण्टा—
पल्यां तथा ग्रामे शतं भूमेः सुसोभनं ॥ चतुराघाटनोपेत्तदा
नंमेतददौ स्थिरं । उपकाराय सर्वेषा मत्कपापविहूतये ॥ उ—
दकग्राहकः तत्रमहाव्रतधरोमुनि । दिनकरो नाम यः साक्षा—
त्कपालीव संकरः ॥ एतदत्तं मया दान पालनीयं नरोत्तमैः
सिवस्यधर्ममिच्छाद्भिः कल्याणमिहजन्मनि ॥ सामान्योयं
धर्मसेतुः नृपाणां काले काले पालनीयो भवद्भिः । सर्वा
नेतान्भाविना पार्थिवेन्द्रान् । भूयोभूयोयाचतेरामभद्र ः ॥
बहुभिर्वसुधा भुक्ता राजानैः सगरादिभिः । यस्ययस्य
यदाभूमिस्तस्य तस्यतदाफलं ॥ षष्टिः वर्षसहश्राणि

Second plate (Obverse)

स्वर्गे तिष्टतिभूमिदः । आच्छेताचानुमंता च तान्ये व नरक वसेत ॥
स्वर्णमेक गवामेकां भूमेरप्येक मगुल (?) । हरन्नरकमायाति यावदाहूत
संप्लवं ॥ विघ्याटवीष्वतोयासु सुष्ककोटरवासिनः कृष्णसर्पाभिजायन्ते

भूमिहर्ता नराश्चये ॥ वाल्स्यान्वय संभूत कायस्थ ऐंवलात्मजः सासनं
सोहिको नाम राज्ञाभ्यर्थ (न) या करोत् ॥

ऊनातिरिक्तमज्ञानाल्लिखितं सासने त्र यत् । प्रणाम
मेव कर्तव्यं संतः सर्वं सहायतः । मंगलमहाश्रीः ।

TRANSLATION.

"Endless enemies secured fast friendship (of Sindhurāja). From him (Sindhurāja) was born Śrī-Bhojadeva, whose great renown as "chastiser of enemies" was heard the world over. Having burnt the hearts of (his) enemies with the flame of his glory he indeed reigned for a long time undisturbed. There was a devotee of his lotus-like feet (or a faithful follower) a prince (or best of men) (by name) Surāditya, of the family of Śravaṇabhadra (or of an "illustrious" family), come from Kanyakubja (Kanouj), who, by slaughtering the (enemy) warriors in the battle with Sāhavāhana and also with other princes, made the royal glory of Bhojadeva stable. On account of his doing so and being at the head of waning Suras, his name, which is "Surāditya", indeed becomes him. His son, Śrī-Jasorāja, passing life in the province of Sangamakheṭa (and) being always religious, shone all the more (made a greater name) for his religion (or charity). Having called sons of the Minister and prominent inhabitants he requested (their) consent (thus) : "To you is known the exploits (of my ancestors)". By them being given consent, he went to the bank of the Narmadā and, on Monday, the day of lunar conjunction, in the month of Mārga-(śīrṣa) of Vikrama year-three plus eleven hundred, (1103),—having bathed and taken permission (of his) preceptor, worshipped the gods ; and in the beautiful temple of Śiva (called) Maṇeśvara on the confluence of (the river) Maṇā (with the Narmadā) offering (holy) water in the direction of Śiva,

facing the south, granted, to the deity Śrî-Ghaṇṭeśvara, the village Viluhaja as also charming hundred (acres) of land in the (neighbouring) village (of) Ghaṇṭāpallī ; (thus) gave this permanent grant (of land) furnished with four boundaries, for the welfare of all (and) or for destroying my own sin. There the person, who accepted the holy water, was a sage of great austerities, by name Dinakara, who was as if Kapīlā-Śaṅkara incarnate. This grant is given by me and should be maintained by princes desirous of (maintaining) the cult of Śiva and welfare in this life. 'This is the common 'bridge of religion' of kings (which) should be protected by you from time to time' so begs Rāmabhadra again and again of all these future kings. The earth was enjoyed by many kings, Sagara and others. Whatever earth one (gives) that much reward he gets. A giver of land remains in heaven for sixty thousand years. Whoever takes it away by force and who consents (to do that) all those (go to) dwell in hell. By taking away a little gold, a single cow, or even a finger's breadth of earth one goes to hell. People, who deprive (others) of land, come into trouble, (have to wander) in the waterless forests of the Vindhya mountain or are attacked by black serpents living in dry hollows (of tree). The Kāyastha, by name Sohika, son of Aivala, born in the family-Vāla, prepared this grant at the request of the King. Whatever less or in excess is written through ignorance in this grant-(deed), all good people should accept that for helping (the writer). Auspicious Great Glory ! "

THE CAVERNS AND BRĀHMĪ INSCRIPTIONS OF SOUTHERN INDIA.

H. KRISHNA SHASTRI

Our present knowledge of the history of the Southernmost part of the Indian Peninsula, derived mostly from indigenous inscriptions does not extend farther back than the 7th century A. D. The possibilty, however, of the existence of a long-standing earlier civilisation and dominion is suggested by references in Aśoka's Edicts to the kingdoms of Cōḷa, Pāṇḍya and Kēraḷaputta[1] bordering on that of the great Mauryan Emperor and to the mutual commercial relations said to have existed between the countries of Pāṇḍu (*i. e.*, Pāṇḍya) and Rome, as gathered from the statements of early foreign travellers. Nearer home we have the further evidence of the epics *Rāmāyaṇa* and *Mahābhārata* and a host of līterary references including those of Kātyāyana, Kālidāsa and Varāhamihira, which lead to the same conclusion. Still the data for the existence of a Dravidian civilisation distinct from that of the now-existing superimposed Aryan element of literary, political, religious and scientific thought, is but indefinitely postulated and the evidence in proof thereof scantily put forth. We are asked to look for traces of the ancient Drāviḍas of

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1 Professor S. Venkateswara Ayyar, M. A., has stated in his latest contribution to the *Indian Antiquary* that still another Southern country mentioned as bordering on Aśoka's dominions *viz.*, that of Satiaputta must be verified with the country surrounding Conjeevaram which according to the *Sthalapurāṇa* of the place was known as the kingdom of Satyavrata.

Southern India in the Dasyus, Kirātas, Vyādhas, and Śabaras of Sanskrit literature, whose modern representatives are again assumed to be the hill-tribes of the present day with their crude customs and manners. It is not possible to believe that the Dravidian civilisation which, if it deserved that name at all, must have counted in it salient elements such as civil administration, military organisation, commercial adventure, religious forecast and scientific enquiry should have dwindled down into nothing but feticism and the ill-bred lawlessness of the aboriginal tribes of Southern India. Much less would it be reasonable to work back from the rude elements of the present-day aboriginal institutions to arrive at the essentials of Dravidian civilisation. It appears, therefore, more scientific to suppose that the Dravidian elements of civilisation that existed at the time when the Aryans came into contact with Southern India were at once recognised by the conquerors and fast became assimilated with those of the superior and super-imposed civilisation of the latter, the two races becoming largely mixed up, and the uncivilised element in society which must have existed even then, finding shelter only in mountains and forests as it does to this day. Consequently the elements of Dravidian civilisation if any, have to be worked out purely from literature and possibly also from a comparative study of civilised institutions both Northern and Southern. Epigraphical research, too, contributes not a little in this direction as will be recognised in the present paper dealing with the Natural Caverns and Brāhmī Inscriptions of Southern India. Before proceeding to give the preliminary readings of these Brāhmī records and descussing their importance from the standpoint of the Dravido-Aryan

elements that may be contained in them it would be useful to acquaint the reader with a general description of these very interesting monuments, the natural caverns so called.

It is a peculiar physical feature of the Madura and Tinnevelly districts to be abounding in isolated hills, sometimes high and sometimes low, with huge boulders indifferently piled up in all possible positions. The higher ones of these hills generally go by the name *Kaḷugumalai* from the fact that they afford shelter to kites (Tamil : *kaḷugu*). High boulders standing on their narrow bases and affording shelter by their expanding tops to the rocky surfaces below naturally make good resting-places for shepherds and other people who might frequent these spots. The existence of large numbers of such boulders form the general characteristic of these hills.

About twenty of such rock-shelters distributed over a wide area in the districts mentioned above, have been discovered to be of considerable antiquarian interest. These may have been once utilised as dwelling-places by their primitive occupants by closing up part or parts of the opening all round, either by mud walls or by rubble. Even to-day the space below these sheltering rocks is often found divided into dark cells by partitions of mud-walls,--of course by resident mendicants who, according to an old tradition, still preserved by them, like to resort to these caverns commanding natural beauty. Common folk, however, connect them with the five Epic heroes, the Pāṇḍavas of the *Mahābhārata* and consequently call the hills Pañcapāṇḍavarmalai or Pañcavarkoṭṭu and the beds Pañcapāṇḍavarpaḍukkai, a spot on the Siddharmalai hill near the

village Mōṭṭupaṭṭi being even now recognised by the villagers as the seat of Draupadī (!). This tradition significantly reminds us of the analogous Ceylonese tradition regarding king Paṇḍukābhaya of the 4th century B. C.

While most of the caverns are at easily accessible heights of the hills, some are almost inaccessible and are reached through steep and narrow ravines. Traces of small foot-holds and holes for fixing supports where necessary, could also be seen in the case of caverns situated at great heights. Invariably the presence of a water-spring seems to have been taken advantage of, in converting these natural shelters into dwelling-places. On the rocky floor below are found numerous beds measuring on the average 1½ to 2 feet by 4½ to 6 feet, dressed and made smooth with pillow-sides slightly raised in most cases. A drain to carry off the rain-water from encroaching on the beds was always cut and a similar cutting was made on the brow of the sheltering rock almost to the full length of its open front to carry off the water running down from the top of the boulder Below the drip-ledge and generally on a dressed surface are cut the Brāhmī inscriptions—the subject of this paper. In a few cases they are cut on the beds inside the caverns. Along with Brāhmī records, we find sometimes sculptures of either isolated Jaina images or big rows of them with inscriptions in the rounded Tamil character called Vaṭṭeḻuttu of about the 8th century A. D., cut below.[2]

2 Rocks exclusively occupied by Jaina sculptures and Vaṭṭeḻuttu inscriptions are not uncommon in the Tamil country.

Who were the authors of these beds and Brāhmī inscriptions? Firstly, it is useful to enquire whether previous to their occupation by the authors of these beds and inscriptions whoever they might be, there had been others who were using them and secondly whether the beds and the inscriptions are contemporaneous. The late Rai Bahadur V. Venkayya was of opinion that the inscriptions and beds were synchronous and we may accept his view since stone beds have been noticed in the Buddhistic caves of Bhājā, Kudā, Junnār, Ajaṇṭā and Koṇḍivte, and since the Brāhmī inscriptions in question are sometimes found written on the beds themselves, as already observed. As regards the first question I may refer to Mr. Parker who in describing the ancient peoples of Ceylon makes elaborate references to thousands of natural caverns or rock-shelters which formed once the abodes of the wild Vaeḍḍas of that island, who, he believes, abandoned them in pre-Christian times just when Buddhists entered Ceylon, and converted these into residences for their ascetics. The Vaeḍḍas themselves are traced by Mr. Parker to the Cōḷa and Pāṇḍiyan Tamils. It is not improbable that as in Ceylon, the natural caverns in the Madura and Tinnevelly districts may have been occupied in pre-Buddhistic times by indigenous aborigines who were perhaps as Mr. Parker suggests, the ancestors of the Vaeḍḍas of Ceylon or similar other wild hill-tribes. One point of difference, however, between these caverns and those of Ceylon is the provision made in the former for stone beds for the use of the Buddhist occupants. Another is that the language of the Brāhmī inscriptions on these caverns far from being purely Buddhistic Pali as in Ceylon, is in a mixed

dialect, perhaps in use among the then inhabitants of Southern India,—the Vaeḍḍa ancestors spoken of above. Certain peculiarities of the alphabet too which are noticed below may also distinguish these records from the almost contemporaneous Pali records of Ceylon.

Thirty-one Brāhmī inscriptions selected from eleven different villages are given below in illustration of the remarks made above. There may be a dozen others which have been so far discovered; but these are very much damaged and indistinct. The Madras Epigraphical Reports for 1912, 1915 and 1918 include photo-litho plates of all these records.

I.

MARUGĀLTALAI is a village in the Tinnevelly district about 10½ miles North-east of Palamcottah, on the other side of the river Tāmraparṇī. On the Eastern side of the low hill near this village, is a broad cavern formed by a huge overhanging rock sheltering below it a rocky floor on which are chiselled a number of beds at convenient places in four different sections. The cavern measures in length 52 feet, North to South, but is only 8 feet deep. A little below the '*katarh*' or water-drain cut on the edge of the sheltering boulder is engraved the inscription subscribed below in clear Brāhmī script of about the 3rd century B. C.,—the characters ranging in height from 1′ to 1′, 3″ the largest size found for the Brāhmī characters with which we are now concerned. There are no sculptures in the cavern as we find in other cases; nor do we find any water spring, in the rocky hollows adjoining the cavern. On some of the beds, however, are cut Tamil letters and

diagrams of a recent date among which may be specially noticed a Pallava lion of the 5th century A. D. which we find also on old coins and copper-plate seals. The Brāhmī inscription was brought to the notice of the Archaeological Department by Mr. L. A. Cammiade in 1906-07 when he was a Divisional officer in Tinnevelly and its importance was recognised and noticed by Rai Bahadur V. Venkayya in his Epigraphical Report for 1907, though four years previous to this a similar inscription was secured by Mr. Venkoba Rao at Kīḻavaḷavu near Mēlūr but its importance was not then recognised. I tentatively read the inscription thus :—

Text.

Vē ṇa kō[2a] si pā nā
ku ṭu pi tā k[ā] [la] kā ña
cha ṇa ma

Remarks.

The word *kōsipānā*, if it has been read correctly may be compared with the skt. *Kāśyapānām* and *kuṭupitā* which often occurs in these inscriptions, with the Tamil *koṭṭuviṭṭāṉ* "caused to be cut"; cf. also Childers: *koṭṭēti*.

II.

ĀṈAIMALAI is a celebrated place of pilgrimage, only 5 miles from Madura, on the Mēlūr road. It was perhaps evidently so called from the shape of the hill which is prominently seen from several miles to be like

2a. The syllable *kō* has been read directly from the stone. In the impression, however, there is a clear resemblance to *ki*.

a sleeping elephant *āṉai* with its trunk hanging down. Almost at the top of its proboscis is a natural cavern with the usual beds cut into it. At the foot of the hill are groups of Jaina figures with inscriptions below them, cut on huge boulders and also one or two abandoned Jaina shrines. The great Śaiva Saint Tirujñānasambandha is said to have crushed the pride of the Jainas who had established themselves at Āṉaimalai and other Jaina centres in the South. The cavern containing the Brāhmī inscription is 23 feet 6 inches long and 3 feet and 1 inch high, at its entrance, in the centre. There are several rows of narrow, longish beds, some spreading East to West and others North to South. No sculptures which prove subsequent Jaina occupation are found, for the evident reason that the Jainas had their own distinct quarter lower down the hill. The inscription has been tentatively read thus:—

Text.

[1] I va[ṁ] je nā ḍu[3] tū u
ḍai[3] yu ḷa[4]] pā[5]] ta na tā nā ē
ri ā ri ta nā
[2] a tā[6] tu vā yi a ra ṭaṁ
ṭha kā yi pā nā

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3 These are letters the formation of which is not found elsewhere. I have suggested the readings *ḍu* and *ḍai* on the strength of the remarks on the letter *ḍa* made by Dr. Bühler on the paleography of the Bhaṭṭiprōlu inscriptions; *Epigraphia Indica* Vol. II, pp. 323 ff. Still the letters read *ḍu* and *ḍai* are not certain. They may be conjunct consonants as well.

4 This symbol for *ḷa* occurs occasionally in the ancient inscriptions of Ceylon. But here the letter is rather broad.

5 The letter may possibly also be read as *pō.*

6 The clear dot after the letter *tā* is probably to be taken as an *anusvāra.*

Remarks.

This is one of the best preserved of the cavern inscriptions. We have very few doubtful letters here and yet the meaning is not clear. If the fifth syllable has been correctly read we have here the Tamil word *nāḍu* preceded by the proper name *Ivaṁje*. Similarly *uḍaiyu* may correspond to the Tamil '*uḍaiyān*' a chief. It may be observed also that *ēri* in Tamil means "a tank". *Āritanā* like *kōsipānā* of Marugāltaḷai may stand for the Sanskrit *Hāritānām*. I cannot make bold to suggest that in *tātuvāyi* we may find the Prakrit form for *taṁtuvāya* 'a weaver.'

III

TIRUPPARAṄKUṈṞAM near Madura is celebrated for its temple of Kumāra and attracts large crowds. This temple is a rock-cut shrine bearing an old inscription of about the 8th centuary A. D., which speaks of the consecration of an image of Jyēṣṭhā Durgā in that rock-cut temple. On the Eastern slope of the hill is the cavern with beds and two Brāhmī inscriptions at a rather inaccessible height. It measures 56 feet in length, North to South and is 20 feet in depth and 5 feet 10 inches in height, in the centre. In another part of the Tirupparaṅkuṉṟam hill are some more beds cut into the rock but without inscriptions. A full description of the antiquities of Tirupparaṅkuaṉṟm is given in the Madras Epigraphical Report for 1909, pp. 68 ff. The one peculiar feature of this cavern is that it has two low benches cut into the rock in addition to the usual beds. One of the benches measures 5 feet by 1 foot 9½ inches and the other 6 feet by 3 feet. The two Brāhmī inscriptions again are not written on the brow of the cavern but on the pillow-sides of two of the beds.

Text.

[A] Ē ru k[ō] [ṭu ra] i jaṁ[7]
ku ṭu ma [pi ka] nā pō
lā l[ai] ya nā.

Remarks.

The letters in this inscription again are perfectly clear. *Ērukōṭura* may stand for a place-name like Ērukōṭṭūr. In *kuṭumapika* we may, by eliding the vowel on *ma*, get the expression *kuṭumpika* (*kuṭumbika*) which occurs in Pāli inscriptions for 'a husband-man.'

Text.

[B] C h[ə] ya[8] tā ā ya[8] cha[9]
ya[8] nā nai ṭu ch[ā][9] ta nā.

IV

ARIṬṬĀPAṬṬI. The village which goes by this name is mid-way between Mēlūr, one of the important taluk-towns of the Madura district and the Aḷagarmalai Hills. The hills near Ariṭṭāpaṭṭi on which the caverns, Pañchapāṇḍava beds and Brāhmī inscriptions are found, are nearly 3 to 4 miles away from the village and belong properly to a smaller village named Māṅguḷam and are locally known by the general name of the Kaḷugumalai Hills. The ascent is through the

7 The formation of this letter again, is very peculiar. Its similarity with the Khālsi Aśokan *ja* given on Bühler's Tafel II-15, 2, is very slight. One can venture to say that it is somewhat like the modern Tamil *ḷa*.

8 These three letters written somewhat irregularly have been read as *ya*.

9 *Cha* in both these cases has a vertical tail below as in the Bhaṭṭiprōlu inscriptions.

rocky slopes of the hill, sometimes almost inaccessible. There are as many as five caverns with the usual beds and Brāhmī inscriptions on the Eastern slope of the hill. The long inscription in the lowermost cavern is not written on the brow of the overhanging boulder but on another which forms the back wall of its northern portion. The floor of the cavern is sandy and hence no beds are found in this cavern. The southern part of the cavern extends to a depth of 49 feet 5 inches between two boulders that serve as walls. The entire length of the cavern which is a curve, is 58 feet and the height at the opening is 11½ feet roughly. The *katarh* on one of the upper caverns is missing and another with two short Brāhmī inscriptions there are as many as 31 beds both inside and outside, on a projecting platform. One of the beds in front of this last cavern measures 7 feet 8 inches by 5 feet and is on a higher level than the others and occupies a central position. The inscription in the lowest cavern, which is the longest so far discovered, is read thus :—

Text.

[A] Kā ṇi[10] ya n[ā][11]na tā si
ri ya ku a nā dha mā ma
ī tā na ṭi ña chā ṭṭhi ya
nā sā l [ā] kā nā ī ḷā ña
chā ṭi kā nā tā na tai ya
chā ṭi kā nā chē ī yā pā
ḷi ya.

---

10 There appears also a vertical stroke attached to *ṇa* at the bottom like the medial *u*-sign.

11 Length of *nā* throughout these inscriptions is generally of the Bhaṭṭriprōlu type.

[F. O. C. II 43].

Remarks.

The only observation that might be made here is the occurrence of the expression *chāṭṭhiyānā* once and perhaps, its variant *chāṭikānā* twice. Can *che ī yā* at the end stand for *chaityāni* and *pāḷiya* for *pālya*? If so, these would be some at least of the Prākṛit words in the inscription. The three possible words *siriyaka*, *siriyaku* and *yakāsītikā* which occur in this and in B and E below, include in them the word *yaka* (=*yakṣa*) which is not uncommon in Buddhist names. We find again *yakānā* in 10 (C) below. Mr. Parker believes that the *yakas* (=*yakṣas*) are to-day represented by the Vaeḍḍas of Ceylon. The other inscriptions are:—

Texts.

[B] Ka [ra] ṇi ra n[ō] tā si ri ya ka [rū]
[C] [12]Ch[ā] na tā ri tā nā ko ṭū pi tō nā
[D] Ve ḷa a ḍai ni kā mā tō ra ko ṭi [o ra][13]
[E] [Ve] ḷa [a] [ḍai] ya ni kā mā t[ā] ko
[pō] ti ra [ya] kā sī ti kā a [ri te] a
sā tā nā pi ṇā ka ko ṭū pi tō nā

Remarks.

The expressions *Veḷaaḍainikāmā* and *Veḷaaḍaiyanikāmā* occur in both D and E above. The extra syllable *ya* of the latter may be compared with the superfluous consonant *y* which occurs frequently in Tamil inscriptions after syllables ending in medial *ai*. *Koṭūpitōnā*

12 There seem to be three dots before *cha* arranged like the Aśōkon letter *i*; but it is highly doubtful if they have to be taken so.

13 The letters *a* and *ra* are engraved so close to each other that they may also be read as a broadly formed *la*.

similarly occurs in both C and E and has to be connected, as already pointed out, with the root *koṭu*. *Nōṭāsiriyaka* of B occurs as *naṭāsiriyaku* in A.

V.

Between KĪḶŪR and KĪḶAVALAVU, nearly 7 miles from Melūr on the road to Tiruppattūr, on a low hill with huge boulders, are seen some caverns containing the usual Pañchapāṇḍava beds and inscriptions. Numerous Jaina figures[15] with Vaṭṭeḷuttu inscriptions below them, are cut into the rock near one of these caverns. The naked Jaina figures are interpreted by the local people as 'school-children'; and the whole spot is connected by them with a school that is supposed to have once existed here. The Brāhmī inscription was discovered by Mr. Venkoba Rao as early as 1903 and is about 15 feet from the ground-level of the cavern. The letters are written upside down and are boldly cut. Mr. Parker refers to an old Brāhmī inscription on one of the Tevāṇḍāṉ Puḷiyaṅguḷam rocks in Ceylon which is written upside down and which he quotes as the first instance of what is known in Ceylon as the *Paeraeli Bāsā* or transformation of letters in written or spoken words. In interpreting it he says that the letters must be read from right to left. It is doubtful if this latter principle applies also to our inscription. It reads thus:—

Text.

ū pā [ch]ā a pō te[16] ṇa ṭu lā vō chhō
ko[16] ṭu pā ḷi ī

15 This must have been a strong centre of Jaina influence like Āṇaimalai.

16 The two letters *te* and *ko*, however, are in the correct position with reference to the reader from the ground.

Remarks.

It may be noted that *ūpāchāa* at the beginning seems to suggest the Prākṛit form of *upādhyāya* and *vōchhō* is likewise synonymous. We have been familiar also with the root *koṭu*; and *pāḷiī* is perhaps comparable with pāḷiya in [IV] (A) above.

VI.

KARUṄGĀLAKKUḌI is a village 8 miles north of Melūr on the Trichinopoly road. The caverns and beds on the hill near this village are of special interest as, besides the usual Brāhmī inscription which is transcribed below, there is a Vaṭṭeḷuttu inscription in Tamil verse cut on one of a row of rocky beds in a cavern higher up on the same hill, which states that a certain chief Paḷḷidaraiyaṉ rendered service in different capacities to his master, the Pāṇḍya king (Vaḷudi or Mīnavan) first, by building a bright *vimāna,* then by stopping the sea from encroaching, by protecting sacrifices at Tiruppodiyil, by his scholarship, asceticism and saintliness (?). There is an apparent reference here, to the sage Agastya whose intimate connection with the Pāṇḍyas, the Podiyil mountain and Tamil literature is well known. The age to which Paḷḷidaraiyan and his master, the Pāṇḍya king, belonged, cannot be determined at present. The Vaṭṭeḷuttu characters, however, suggest a period approximating to the 9th century A. D. One interesting inference which this short inscription leads to, is the evident fact that the beds in the natural caverns were used not only by Jaina saints but also by laymen twelve hundred years ago, as is done by the mendicants of the present day.

The cavern with the Brāhmī inscription measures 33 feet East to West and 33 feet North to South opening both on the southern and western sides. On a rock, opposite to the cavern on the West, is engraved a Jaina image with a Vaṭṭeḻuttu inscription below it, which invokes the teacher Ajjaṇandi. The Brāhmī inscription reads as follows :—

Text.

[E] ṭhu ya r[u] ra a ri ti[17] nā pā ḷi

Remarks.

The first five syllables which end in *ura* may constitute the name of a village. *Pāḷi* occurs in IV (A) and V, above.

VII.

MUTTUPPAṬṬI is a small hamlet about 10 to 12 miles from Madura on the Madura-Tirumangalam road. The last of the hills of the Ummaṇāmalai range which runs parallel to the road on its left side, has a cavern measuring 43 feet East to West, 26 feet deep (on the east side) and about 5 feet high. There are several beds and five Brāhmī inscriptions two of which latter are highly damaged and cannot be read. Two Jaina images cut just above the brow of the cavern have no inscriptions below them. The three legible Brāhmī inscriptions might be read thus:—

Text.

[A] Vi na tai ū ra
[B] Chai ya a ḷa nā
[C] Kā vi ya

17 Between the syllables for *ti* and *nā* the estampage shows a symbol (?) somewhat like that of the mark of interrogation. It may only be a clumsy slit on the stone or may be read as a damaged Aśōkan *kha*.

Remarks.

As in other cases A, which ends in *ūra* may be the name of a village.

VIII.

SIDDHARMALAI is a hill near Meṭṭuppaṭṭi not far from the Pēraṇai Dam in the Nilakkōṭṭai taluk of the Madura district. It contains a specious cavern which measures no less than 297 feet in length and 6 feet 8 inches in height with stone beds and a small shrine enclosed by modern railings for a pair of sandals raised on a platform. The beds which are in two rows have each a pillow-loft with a Brāhmī inscription at the headside. Between these two rows of beds there is another that extends from South to North with an inscription in later Grantha characters. Over the brow of the cavern just above the shrine containing the sandals is a Tamil inscription which refers to these as the sandals of Sahajānandanātha, a Tāntric writer of about the 14th century A. D. The Brāhmī inscriptions are read thus:—

Texts.

[A] Pō ti nā [ū] ra a tā[17a] [nā*]
[B] Ku vi rā a [na] tai ve ya a tā nā
[C] Ku vi rā a na tai ve [ya][18] a tā nā

17a It may be observed that in the letter *tā*, the two lower prongs of which the one on the proper right is generally straight and the left, somewhat curved, have been reversed.

18 This syllable must be *ya* since we have the same expresssion *ve ya* in B above clearly expressed. In this case, however, it deserves to be noticed that the right half of the letter has been omitted and the whole looks like the modern Nāgarī व without the top stroke.

[D] Ti ṭō ī la a tā nā
[E] A na tai a ri ya
[F] Ti a na tai [ī ra] vā ta nā
[G] Ma dhi r[ā] a na tai [vi][19] su vā nā
[H] Chā na tā na tai chā na tā nā
[J] A na tai v[e] na tā a tā nā

Remarks.

Nos. B and C are identical. *Pōtināūra* of A possibly contains the name of a village. *Atānā* occurs in 6 of the Siddharmalai inscriptions, one of Koṅgar-Puliyaṅgulam noticed below and 2 of Aḷagarmalai (*seq.*) *Anatai* occurs seven times in the Siddharmalai inscriptions. Rai Bahadur V. Venkayya has tried to explain in his Epigraphical Report for 1908 (p. 59) *anatai ariya* (E) as 'the dwelling place of the Buddhist saints.'

IX.

KOṄGAR-PUḶITAṄGUḶAM. This is a village on the 11th mile from Madura, on the Madura-Tirumangalam road. On a low range of hills about 200 yards to the North-East of the village and at a height of about 25 yards from the hill, are three huge boulders forming natural caverns below them. They are now used for shelter from sun and rain, by shepherds and their folds. The caverns extend from East to West for a length of about 297 feet. The greatest depth is 55 feet 9 inches and the height 6 feet 9 inches near the inscribed brow. Higher up on the rocks are some Jaina figures and a Vaṭṭeḻuttu inscription. The Brāhmī inscriptions read thus:—

19 The letter *vi* is incomplete on the impression.

Text.

[A] Ku ṭū[20] ko ṭu pi tā vā nā ū pā
chā a nā [ū] pā [ṭū][20] va[(20a)]

[B] Pā kā nā ū ra pē t[ā] t[ā] nā pi
ṭā nā ī ta tā ve pō nā

[C] [Ku] ṭ [ū] kō ṭā la ku [ī] ta tā vi
nā chē ṭū a t[ā] nā lē nā

Remarks.

KUṬŪ which occurs in A and C is perhaps the same as *kuṭu* of Triupparaṅkuṉṟam [A]. *Koṭupitā, kuṭupitā, koṭūpitō,* are all connected with each other and with the root *koṭu*. The five syllables *ū pā chā a nā* may suggest the Sanskrit *upādhyāyānām*. *Itatā* of B may also be noted to be the first element of the word *ītātārinā* of C. The five syllables *pā kā nā ū ra* of B may be compared with the name of an old territorial division called *Pāgaūṉru-kūṟṟam* which, however, was to the North of Madura. *Lēnā* in C may be the Pāli *lēna* (*layana*) 'cave.' If so this will be the one clear Pāli word found in these inscriptions. Of the two symbols of punctuation which occur in B and C, the latter is found also in early Ceylon inscriptions (Parker's *Ancient Ceylon* plate p. 446).

X.

AḺAGARMALAI. This is the highest hill on which we find caverns, beds and Brāhmī inscriptions. Those on the other hills may not be said to be at any

20 The letter *ṭū* which occurs twice in this inscription shows two different forms of the medial *ū* sign.

20*a* It is not unlikely that this last letter is part of a punctuation which we find in the case of the two other inscriptions from Kosigar Puḷiyaṅgulam.

great height though in most cases they are also inaccessible. The inscriptions here are 8 in number. One of those is written on the pillow-side of a stone-bed. The rest are on the chiselled brow of the sheltering rock which is nearly thirty feet above the floor. In the cavern is an image of Ajjaṇandi with the usual invocatory Vaṭṭeḻuttu inscription below it. There is a natural spring of water in one corner of the cavern. The approach to the cavern which is most difficult is through a thick jungle and narrow ravines intercepted by steep rocks. The inscriptions read thus:—

Texts.

[A] Mā [ta] ti [rai] yi pō nā ku la vā nā a
[ta] nā a t[ā] nā
[B] M[ā] ta ti rai ko [pā] pu vā ṇi ka nā
[C] Ya kā nā kō ṇa ti kā nā
[D] Kā ṇa ka a t[ā] nā m[ō] ka nā a ta nā
a tā nā
[E] Sā [ma] mi si nā[21] mi ta ti
[F] Ru[21] pā ṇi tī vā ṇi [ka] nā na ḍu
ma lā nā
[G] [Vā ṇi] ka nā yu ḷa nā ta nā
[H] Chi ka ṭṭha mā ṭū na tā nā tā ra a
ṇi y[ā] k[o] ṭū pō tā a va nā
[J] A nā ka nā nā

Remarks.

The expression *Mātatirai* occurs in both A and B, the former giving as in Nos. IV (D) and IV (E), an extra consonant y after *rai* which is a feature of Tamil

21 Between the letters *nā* and *mi* there is space for one letter which has been left blank. The same is seen between the syllables *ru* and *pā* of F.

orthograghy. *Vāṇikanā* appears in B, F and G. Probably this has to be connected with Sanskrit *vaṇik* or Tamil *Vāṇiyaṉ*. Of the symbols used here for punctuation the *svastika* is familiar. Inscriptions H and J are fragmentary since they do not end with any mark of punctuation.

XI.

ŚITTAṆṆAVĀŚAL is a village about 22 miles from Pudukkōṭṭai bordering on the Madura district. The high hill near it contains a cavern with beds described in the Annual Report on Epigraphy for 1915. The spot where the cavern lies, is known as *ēḻaḍippāṭṭam* on account of the seven (*ēḻu*) square holes in the steep rock which are used as steps in reaching it. The Brāhmī inscription is written on two sides of one of the seventeen beds in the cavern. It is read thus:—

Text.

E u mi nā ṭ[u] ku mu ṭṭha [ū] ra
pi ḍā na tā kā vu ṭi ī te nā ku
chi ṭū pō chi la ī ḷā ya ra che ya
tō a ti ṭa a nā ma

Remarks.

Here again *nāṭu* and *ūra* might indicate the district and village names respectively.

CONCLUSION.

From the remarks made above it would appear that words like *kuṭupitā*, *koṭūpitō*, *koṭupitā*, *kuṭū*, *nāḍu*, *uḍaiyu* and *ēri* and the adding of a superfluous *y* after words ending in medial *ai*, point to what may be called the Dravidian element in the language of these inscrip-

tions. In arriving at the proper interpretation of these records it may also be necessary, as in Tamil, to take some at least of the consonants as basic (*i. e.*, *ardha-akṣaras*) as of course we have to treat the palatal *ña* in *kālakāñacha* in No. I and *ṭiñachāṭṭhi* and *īlāñachāṭi* in No IV A. The words *ūra*, *ora* or *ura* in *Erukōṭura*, *Eṭhuyaura*, *Kotiora*, *Vinataiūra*, *Potināūra*, *Pākānāūra* and *Kumuṭṭhaūra* and the words *nāḍu* or *nāṭu* in *Ivaṁjenāḍu* and *Eumināṭu* are apparently Tamil.

The words *kōsipānā*, *āritanā*, *kuṭumapikanā*, *chēīyā*, *pāḷi*, *pāḷiya*, *pāḷi*, *ūpāchāā*, *ūpāchāanā*, *vōchhō* and *lēnā* similarly, represent the Prākṛit element of these records, more or less clearly expressed. The numerous words ending in *nā* in all the inscriptions may be taken to be the genitive plurals ending in *nāṁ* *e. g.*, *Sāvatīyāna*=*Śrāvastīyānām*. With reference to *kāḷakāñcha* in No. I it is worthy of note that *kālakañjaka* according to Childer's *Pāli Dictionary* is a 'sort of *Prēta*' and *Kālakañja* according to Monier Williams is the 'name of a Dānava family.' The words *Sālākānā* and *Chāṭikānā* appear to be connected with the Pāli words, *salākā* and *chāti* the former of which means 'a ticket for food given to Buddhist monks' and the latter 'an earthern vessel.' *Kulavānā* may likewise be connected with *kulava* 'a member of a high family.' *Nikāmā* which occurs twice in the Ariṭṭāpaṭṭi inscriptions may possibly stand for *nigama* or *negama* which in Pālī means 'a mercantile guild.'

One other point which lends these inscriptions a purely southern characteristic may also be noted. It is its paleography which often resembles the alphabet of the ancient inscriptions of Ceylon and in some cases the Bhaṭṭiprōlu casket inscriptions. In a few

other cases, again, they supply an exclusively new type. The symbol ÷ for instance occurs ten times in these inscriptions. For the first time it has been found hitherto only in the Kshatrapa and Āndhra inscriptions of the 1st century A. D. But the symbol occurs in the ancient Brāhmī inscriptions of Ceylon where, however, it is read as short *i*. The modern Tamil *ī* is quite similar to it and is very probably derived from it. Two forms of *ja* occur. One is the regular type found in the Brāhmī inscriptions of Aśōka and the other is the one with a loop in the middle formed somewhat like the Kālsi *ja* but still different from it. This rare form occurs in the Tirupparaṅkuṉṟam inscription only. The length of *na* throughout is after the Bhaṭṭiprōlu type. The letter *ma* which is formed with the *u-like* tube opening upwards with a cross line about its middle, is quite peculiar to these cavern characters and is found again only rarely in the Brāhmī inscriptions of Ceylon. The Dravidian *ḷa* which occurs 7 times in these inscriptions does not at all figure in the Northern Brāhmī inscriptions but is occasionally met with in the ancient inscriptions of Ceylon. The letter *ṭṭha* (written actually as *ṭhṭa*) occurs thrice in these inscriptions and is the only double consonant found in them. The symbol for *ḍa* is quite peculiar and is found nowhere else except in these inscriptions.

I have nothing more to add to this imperfect paper but to request the scholars congregated here to pay their earnest attention to these new inscriptions of Southern India and to arrive at an indisputed interpretation of them which if done, must, I am sure, set at rest the hypothetical theories about the antiquity of the Drāviḍas and Draviḍian civilisation, which is so much discussed.

ANCIENT HISTORY.

DATE OF CORONATION OF MAHĀPADMA

BY

HARIT KRISHNA DEB.

The most systematic literary account of the dynastic history of India during the period following the Bhārata war is to be found in some of our Purāṇas. In concluding their dynastic account, the three earliest Purāṇas, the Matsya, Vāyu and Brahmāṇḍa, assert that the account has been carried down to the 836th year (elapsed) "after Mahāpadma" (*Mahāpadmāntare* or *Mahāpadmottare*).[1] This expression should be understood to be equivalent to "after Mahāpadma's coronation." ; for, the preceding verse counts back from that king's coronation, showing that this event, and no other, has been taken here as the pivot of reckoning. I propose to attempt, in this paper, to arrive at a definite date for this important event.[2]

The best way in which we could do it would be to try to determine the Christian equivalent for the last definite date given in the Puranic chronicles, namely, the 836th year after Mahāpadma's coronation. This year must fall somewhere about the fifth century A.D. For, in the first place, the Greek notices leave no room for doubt that the Maurya dynasty had already been established before the end of the fourth century B.C. ;

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1 Pargiter, *Dynasties of the Kali Age*, Oxford 1913, p. 58, 5-10.

2 A notable attempt has recently been made by Mr. K. P. Jayaswal in JBORS, June 1917. I have much pleasure in acknowledging that a perusal of Mr. Jayaswal's paper prompted me to examine the problem for myself, with the result embodied in my present essay.

secondly, Aśoka, the third Mauryan king, refers in one of his inscriptions to five Greek princes one of whom, Magas, reigned in Cyrene from c. 300 to c. 250 B.C.[3] Since the tenure of power by Mahāpadma's dynasty could not have lasted longer than a century, and may have endured only for forty years as certain MSS. of the Vāyu assert,[4] the coronation of Mahāpadma must be placed approximately within the hundred years comprising the latter half of the 5th century and the first half of the fourth century B.C. ; and 836 years after that would take us down to about the 5th century A.D.

Now, I do not think that the authors of the Purāṇas were oblivious of the fact that their chronology would be meaningless if not referred to some era. Several eras were in existence in the 5th century A.D.,[5] and we should be surprised if Indian historians of such a late period, setting their hands to the task of giving an account of kings and their reigns in a sober and systematic form, free from all glamour of mythology, allegory and rhetoric, evolved a chronicle without an intelligible chronology, without any reference to a definite point of time with which the people of those days might be familiar. It may be said that the eras then in use were mostly established by some particular kings, and the adoption of any one of their reckonings would have endowed the account with a political complexion, with a bias hardly befitting the impartial historian. But there was one era not open to this objection. This was the *laukika* era used by Kalhaṇa in his Rājataranginī, the only known regular book of history, as understood in Europe, in the Sanskrit

3 JRAS, 1914, p. 945.

4 Pargiter, *op. cit.*, pp. 25-26,

5 e.g., Vikrama, Śaka, Kalachuri, Gupta.

language. Kalhaṇa knew the Śaka era : he gives the equation for converting his laukika years into the corresponding Śaka years ; yet he adopts the laukika in preference to the Śaka era in his chronology of the kings.[6] This preferential procedure, as well as the fact that the Kashmir chronicler begins to give his dates according to the laukika reckoning as soon as he is able to present a reliable, dated history, shows that in the Middle Ages Brahmanical history-writers employed the laukika era in their chronology. Kalhaṇa's first recorded date corresponds to the year 813 A.D., expressed by him as the 89th year of a laukika century ;[7] but the custom of dating kings according to the laukika era was very probably quite archaic in Kalhaṇa's time, since Kalhaṇa admits having borrowed his materials from earlier historians,[8] and there is no reason to believe that in adopting the laukika era he was departing from well-established usage. In fact, his reference to his own period in terms of Śaka and laukika years and to the periods of the kings in terms of the laukika era only cannot be explained except on the supposition that the latter was the orthodox reckoning, at any rate in historical chronology. The custom may well have existed at the time the earliest Purāṇas received their present form. As the Purāṇas were meant for popular reading, the *laukika* or 'popular' era would be eminently suitable for employment in Puraṇic chronology. Moreover, one name for the laukika era is *Śāstra-saṃvat,* that is to say, 'the era

6 Stein, *Kalhaṇa's chronicle of Kashmir,* vol, I, introd., para 56.

7 Ibid, vol. I, p. 183, v, 703.

8 Ibid, introd., paras 21-23.

9 IA XX, p. 152.

used in the Śāstras'; and the Purāṇas, certainly are Śāstras requiring the use of an era. Now, it is remarkable that, immediately following the statement that the dynastic account should be considered as coming down to the 836th year after Mahāpadma, is to be found, in the Matsya, Vāyu and Brahmāṇda Purāṇas, an exposition of the Saptarshi reckoning[10] which is identical with the laukika reckoning. It is difficult to resist the inference that the object of this juxtaposition is to indicate that the account has been carried down to the end of a Saptarshi centennium ; in other words, the 836th year after Mahāpadma's coronation is nothing but the last year of a laukika or Saptarshi century.

Such an inference being acknowledged, it is easy to show that this Saptarshi century corresponds to the hundred years 324-424 A.D. For, no other Saptarshi century will preserve the Graeco-Indian synchronisms alluded to above. Take for instance the century 224-324 A.D. ; Mahāpadma's coronation would fall in 513 B.C. ; and since his dynasty did not last more than a hundred years, Chandragupta would come to the throne in 413 B.C at the latest, which is impossible. Take again the century 424-524 A.D.; Mahāpadma would be crowned in 313 B.C., and since his dynasty did not last less than forty years, the earliest date for Chandragupta's accession would be 273 B C., which is inadmissible. The year 424 A.D., the last year of the Saptarshi century 324-424 A.D., corresponds, therefore, to the 836th year after Mahāpadma's coronation, which event should consequently be assigned to the year 413 B.C.

We have another set of data yielding the same result. The Purāṇas, in introducing their dynastic

10 Pargiter, *op. cit.*, pp, 58-59.

enumeration, declare their object to consist in the presentation of the dynastic history of the Kaliyuga.[11] The accounts close with the statement that the end of the Kaliyuga 'will be' reached.[12] Here the future tense should not be taken too literally; for, it is only in conformity with the Historical Future used throughout the enumeration from Adhisīmakṛṣṇa Paurava downwards, being, in this respect, analogous to the Historical Present tense employed by Western historians even to this day. Towards the end of the chapters in Matsya and Vāyu[13] which quote the dynastic account from the Bhaviṣya Purāṇa occur some verses developing the yuga-theory and bringing it into connexion with the seven Rishis and the Lunar and Solar dynasties. The *bhaviṣya* technique could here be set aside. Consequently, we find it explicitly stated in Matsya, 273, 59—

Kṣīṇe Kaliyuge caiva tiṣṭhantiti Kṛte yuge...[15] i. e. "The Kaliyuga having passed by, (the seven Rishis) *are* in the Kṛtayuga..." ;

and verse 76-77 of the same chapter employ the past tense

> aṣṭāvimśasamākhyātā gatā Vaivasvate'ntare
> ete devagaṇaiḥ sārdham śiṣṭā ye tān nibodhata
> catvārimśat-trayaś-caiva bhaviṣyāste mahātmanaḥ
> avaśiṣṭā yugākhyāstu tato Vaivasvatakṣayaḥ.[16]

i. e. "The 28 intervals (=the 28 caturyugas) within

11 Ibid, p. 2.

12 Ibid, p. 56.

13 The Bangabāsī editions of the Matsya and Vāyu Purāṇas are referred to in my text and notes here.

14 Mt. ch. 273; Vā. ch. 99.

15 Cf. Vā 99, 441, where *tisṭhantiti* has been changed to *bhavisye tu*, still conforming to the 'future' technique.

16 Cf. Vā. 99, 459-60. The word *ksayaḥ* occurs corruptly as *hyayam* in Mt.

the Vaivasvata period *have already passed away* : these, together with the devas (have passed away). Hear what remain : 43 future (yugas)...then will come the end of the Vaivasvata (manvantara, consisting of 71 caturyugas)". Clearly, therefore, the last definite date in the Puranic account—the 836th year after Mahāpadma's coronation—is the same as the last year of the Kaliyuga of the 28th caturyuga in the Vaivasvata manvantara.

Again, according to the Purāṇas, the beginning of the Tretāyuga is the starting-point of History. The Mārkaṇḍeya Purāṇa, for instance, speaks, in canto XLIX, (ed. Pargiter) of the first stage of man's life as belonging to the sky. "Those kalpa-trees were produced which are called houses, and they brought forth every kind of enjoyment to those (people). At the beginning of the Tretā age, the (people) got their subsistence from those trees...Afterwards, in course of time, those (people) grew covetous ; besides, their minds being filled with selfishness, they fenced the trees round and those trees perished by reason of that wrong conduct on their part. Strife sprang up in consequence ; their faces felt cold and heat and hunger. Then, for the sake of combination and resistance, they made towns at first ; and they resorted to fortresses...and they first made measures intended for measurement...they also (constructed) the pura, the kheṭaka...and the grāmas. And trees and shrubs bearing flowers and fruit in their seasons were produced. This manifestations of vegetation appeared first in the Tretā age." The Matsya, in chapters 142-143, like the Vāyu in ch. 57 and the Brahmāṇḍa in

17 Brāhmāṇḍa Purāṇa, edited by Debendra Nath Basu, Calcutta, B. S. 1302.

chs. 61-62,[17] also asserts substantially the same thing in regard to the Tretā age; and these authorities further inform us that the Vedas were collected (*saṃhata or saṃhita*) in the beginning of Tretā, that the varṇa-system was established in the same yuga, that kings were created first in the Tretā age.

When the Purāṇas say that orthodox history is traceable to the beginning of the Trētā yuga, we may be sure they are referring to the Trētā yuga of the 28th caturyuga in the Vaivasvata manvantara. The first six manvantaras have no relation to history proper: the Purāṇic accounts of their presiding Manus are extremely laconic and partake of the nature of folklore. Each one of these Manus is credited with ten sons; but the sons are not of this earth. It is only the Vaivasavata Manu whose sons belong to our world. This is indicated by the use of the word *bhuvi* in connexion only with them in the Matsya description of the Manus (ch. 9). According to the Vāyu (ch. 62), it was during the Vaivasvata period that corn-cultivation, preservation of cattle, commerce, towns and villages were made possible. The first 27 caturyugas of the Vaivasvata manvantara are as conventional as the manvantaras themselves. All the three Purāṇas, the Matsya, Vāyu and Brahmāṇda, enunciate the principle: whatever happens at a particular period in any yuga happens at the corresponding period in every such yuga.[18] Such a cyclic march of events being assumed, it was easy to carry imagination back over any length of time. There would be no harm, from this standpoint, in imagining the day of the Pitris, called *divya*, celestial, as comprising 360 human or

18 Mt. 144, 103; Vā. 58, 116; Bd. 63, 118.

ordinary days, or in applying the divya calculation to the 12000 years pertaining to a caturyuga. The conventional character of the divya reckoning is fully established by its association, in Puranic accounts, with such expressions as *mānuṣeṇa sañjnitaḥ, prakīrtitaḥ, kavayo viduḥ, āhurmanīṣiṇaḥ* as well as by the unequivocal statement—

divyenaiva pramāṇena yugasaṅkhyāprakalpanam[19].

We are not surprised, therefore, to find in ch. 32 of the Vāyu an account of the yuga-periods without any mention of the divya mode of reckoning. It is thus quite clear that not till we come down to the Tretāyuga of the 28th caturyuga of the Vaivasvatamanvantara can we tread on solid ground; and that we must set aside the divya convention for purposes of plausible history. It may not be out of place to mention in this connexion the fact that, in astronomical treatises of the Siddhānta variety, the calculations are based on yuga-periods;[20] and it seems to be quite in keeping with tradition that the Sūryya Siddhānta should represent the science of astronomy as having been received by the Sun *at the beginning of the Tretāyuga of the 28th caturyuga of the Vaivasvata manvantara*, employing, however, the divya standard of reckoning which met astronomical requirements. Astronomy is the earliest of sciences, and its history is intimately associated with the history of human civilisation; Man's first study betook itself to the twinkling stars, the sun, the refreshing moon, and Heaven's light was his guide.

The interval between the beginning of Trētā and the end of Kali being one or (3600+2400+1280) or

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19 Mt. ch. 142; Vā. ch. 57; Bd. ch. 61.

20 JASB, 1884, p. 261.

7280 years, the acceptance of the date 424 A.D. as marking the end of the Kaliyuga and coinciding with the 836th year after Mahāpadma involves the carrying back of the traditional beginning of orthodox history as handed down through the Purāṇas to the year 6777 B C. There is evidence to show that this was precisely the date assigned to the same terminus as early as the 4th century B.C. Pliny, quoting from Magasthenes, says that the Indians reckoned from Bacchus to Alexander the Great 154 kings who reigned for 6451 years and 3 months.[21] Quoting this passage, Cunningham observes: "As Alexander entered the Punjab in 326 B. C., and left it towards the end of the same year, this account fixes the starting-point of Indian chronology to the year 6777 B. C."[22] Arrian says: "From the time of Dionysus to Sandracottus the Indians counted 153 kings and a period of 6042 years, but among these a republic was thrice established...and another to 300 years, and another to 120 years.[23] The lacuna renders Arrian's figures inutilisable. We may suspect, besides, the accuracy of Arrian's figures as compared with those of Pliny; for, the latter gives even the fraction of a year in the total, and Arrian's round number "300 years" does not admit of easy belief. Pliny's figures are confirmed by Solinus[24] and take us down to Alexander whose precise date we know; whereas Arrian speaks of a period down to Sandracottus whose exact date we do not know. We need not hesitate, therefore, to

21 M'Crindle, *Ancient India* (1901), p. 108; Pliny, *Nat. Hist.* VI, 17.

22 *Book of Indian Eras*, p. 15. C. was, I believe, the first to connect this date with the Saptarshi reckoning.

23 IA, VI, p. 250.

24 Ibid.

accept the figures of Pliny in preference to the vague and incomplete datum of Arrian.

Arrian, however, has preserved some details of the popular legends connected with this traditional beginning of Hindu history: "But when he (Dionysus) was leaving India, after having established the new order of things, he appointed, it is said, Spatembas, one of his companions, the most zealous of his imitators (or the most conversant with Bacchic matters) to be the king of the country, and that when Spatembas died his son Boudyas succeeded to the sovereignty."[25] Spatembas and Boudyas evidently stand for *Svāyambhuva* and *Budha*, as already conjectured. We may thus feel assured that Megasthenes' information regarding the starting-point of Indian chronology is bound up with some form of Purāṇic legend,—a conclusion fortified by the fact that the chronology of the Purāṇas, like the chronology of the Indians as recorded by Megasthenes, is based upon the reign-periods of successive kings,[26] both the accounts being in this respect radically at variance with the standpoint of astronomers like Varāhamihira who flourished in the 6th century A. D. and placed Yudhiṣṭhira nearly ten centuries earlier than the date assigned to that king by the authors of the Purāṇas.[27] The basic identity of the two chronological systems, one represented by the Purāṇas and the other by Megasthenes, guarantees the accuracy of the inference that 6777 B. C. corresponds

25 Ibid, p. 249.

26 Solinus says: "........the calculations being made by counting the kings who reigned in the intermediate period, to the number 153.

27 *Bṛhatsaṃhitā*, ch. 13, 3. See also C.'s remarks in *Book of Indian Eras*, pp. 8 ff.

to the traditional beginning of the Tretā yuga as contemplated in Purāṇic literature. The resulting scheme of chronology is—

Tretā - 6777 B. C. - 3177 B. C.
Dvāpara- 3177 B. C. - 777 B. C.
Kali - 777 B. C. - 424 A. D.

Let us put this result to some rough tests.

The Purāṇas say that the originally single Veda was divided into four parts in the Dvāpara yuga,[28] i. e. between 3177 and 777 B. C. This result is in sufficient agreement with the conclusions of Western scholars in regard to the age of the Vedas. The redaction of Purāṇic literature and its division into eighteen parts is also assignable to the Dvāpara yuga as asserted in the Purāṇas.[29] For, the Matsya and Vāyu Purāṇas, in their dynastic account of the post-Yudhiṣṭhira period, use the present tense in enumerating three contemporary kings of the three principal dynasties,[30] and these three kings are removed from Yudhiṣṭhira by four or five generations; so that the age of composition of the original Purāṇas initiating the dynastic account must be considered to lie in the 14th or 13th century B. C., because Yudhiṣṭhīra, according to the Purāṇas, flourished a thousand and odd years before Mahāpadma.[31] This inference may seem to conflict with the idea that the Kali age began with the death of

28 Mt. ch. 144; Vā. ch. 58; Bḍ. ch. 63.

29 e.g., Mt. ch. 53.

30 Viz., Adhisīmakrsṇa Paurava, Divākara Aikṣvāku and Senājit Bārhadratha.

31 Pargiter, *op. cit.*, p. 58. The enumeration of the subsequent kings had to be made in the future tense, the other two tenses having been appropriated already.

Kṛṣṇa.[32] The fact, however, that the Purāṇas, setting out to give a dynastic account of the Kali Age (1200 years),[33] actually treat of a period extending over more than 18 centuries (1015 or 1050+836 years) shows that they admit more than one standpoint from which the Kaliyuga might be viewed. One view would make Kali begin with Kṛṣṇa's death; another would assign its end to the 836th year after Mahāpadma's coronation. That the former was an old view is proved by the statement in the Bhāgavata—

> yasmin Kṛṣṇo divam yātaḥ tasminnēva tadāhani
> pratipannam Kaliyugam *iti prāhuh purāvidaḥ*.[34]

It seems to have been the view adopted by the earlier Purāṇakāras; for, a summary of the contemporary dynasties from Parīkṣit to Mahāpadma is inserted just after the enumeration of these dynasties which are stated in the Matsya to have lasted *yāvat Kali* (altered in Vāyu to *tāvatkālam*).[35] The other view is connected with the date 6777 B. C. as marking the initial point of traditional history and identified with the beginning of the Tretāyuga. The simultaneous adoption of both these reckonings by the later Purāṇakāras resulted in an overlapping of about seven hundred years; Kali beginning, according to one view, in the 15th century B. C., and according to another, in the 8th century B. C. That such a composite standpoint was in truth adopted by the editors of the Purāṇas is shown by the statement that the Dvāpara and Kali Ages could not be spoken of separately, being inseparably linked together—

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32 Ibid, p. 62.

33 Ibid, p. 2.

34 Ibid, p. 62. See also Mr. Pargiter's opposite remarks on the text, p. 79 (App. I).

35 Ibid, p. 23.

yugapat samavetau dvau dvidhā vaktum na śakyate.[36]

The assignation of Mahāpadma's coronation to the year 413 B. C. would lead us to compare his case with that of his Persian contemporary, Darius II, nicknamed *Nothus* on account of his illegitimate descent from Artaxerxes " the long-handed". Darius usurped the throne by killing his half-brother Sogdianus, another illegitimate son of Artaxerxes, who had assassinated the legitimate heir, Xerxes II[37]. Darius II reigned in Persia from 424 to 404 B. C. Mahāpadma may have been encouraged by the Persian example to seize the throne which did not lawfully belong to him.[38] The probability of the inference will be reinforced by the consideration that the conquests of Darius I (c. 500 B. C.), preceded by the reconnoitring expedition of Skylax down the course of the river Indus,[39] brought the Achaemenian Empire into close touch with India proper, and may have necessitated the formation of a unified Middle Indian Empire, stretching from sea to sea, under the leadership of Udayana, the founder of Pāṭaliputra,[40]—the Empire which Mahāpadma was destined later to constitute into a Great Kingdom under his sole sway by uprooting all the subordinate kings, much in the same manner as Darius I had done with

36 Mt. 142, 38; Vā. 57, 37; Bd. 61, 38.

37 G. Rawlinson, *Ancient History* (World's Great Classics series) p. 88.

38 Pargiter, *op. cit.*, p. 25.

39 V. A. Smith, *Early History of India*, 3 ed., p. 37.

40 See my booklet on *Udayana Vatsarāja.* (March 1919). Dr. Vincent Smith concurs with me in holding that Udayana is the connecting link between Magadha and Avanti. The possible influence of Darius' invasion on the formation of a Middle-India, strong enough to withstand the shock of a vigorous Persian attack, is suggested here for the first time.

the loosely-knit empire of Cyrus.[41] The date of coronation of Mahāpadma appears, from this standpoint, to be a highly important landmark in the course of evolution of the Indian political constitution, and his usurpation of the throne by overthrowing ancient dynasties established a precedent which, in later times, facilitated the continued exercise of kingly power by Śūdra monarchs. Kauṭilya's reaction against " new " (*nava*) and " low-born " (*anabhijāta*) kings succeeded for a time in re-establishing on the throne at Pāṭaliputra a scion of the earlier Nandas[42] ; but the effect was nullified by the liberalising influence of the creed of Aśoka whose patronage of the Yavanas, instanced by the appointment of Tushāspa to the governorship of Girnār,[43] laid the foundations for subsequent Greek rule in the Punjab, and paved the way towards the protracted rule of other foreigners over the whole of Northern India.

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41 Pargiter, *op. cit.* p. 25. M. was *sarvaksatrantaka,* i.e., ' destroyer of all kings '. Only subordinate kings could be meant here. The analogy with Darius I seems perfect when we comprehend the full significance of the Puranic statement that M. destroyed all kings, *being prompted by prospective wealth.* (bhāvinārthena coditaḥ); for, Darius was impelled by the same motive to divide his kingdom into satrapies : D. was ridiculed as an " innkeeper greedy of gain ".

42 Chandragupta's descent from the earlier Nandas is explicit in the Bṛihatkathā. See my note on the subject in JBORS, 1918, pp. 91-95. Dr. Smith has expressed his approval of this finding in his latest edition of the Oxford History (" Additions and corrections "). I have since noticed the passage in Kauṭilya's Arthaśāstra (p. 326, ed. 1919) which adversely criticises *nava* kings, perhaps in view of M.'s conduct. This passage proves that Kauṭilya's master was not a ' new ' king, but, on the contrary, ruled by hereditary right as implied in the Bṛihatkathā account of his origin.

43 EI, viii, p. 43.

NOTES ON THE ANCIENT HISTORY AND GEOGRAPHY OF THE KONKAN.

By P. V. KANE.

From very early times, the western coast of India has been in close communication with the countries of western Asia, Greece, Rome, and Egypt. The whole of the seaboard from Broach to Cape Comorin was studded with marts and emporia that served as warehouses for the products of the whole of India and poured from their ample stores commodities of various kinds into the markets of the West. The Old Testament furnishes ample evidence of an extensive trade between India and Babylon. Ophir, famed in the Bible as the City[1] of gold and precious stones, sandalwood and peacocks, is located by most competent scholars somewhere on the western side of India.[2] It has been argued with considerable reason that many of the things with which Solomon (1016-976 B. C.) added to the pomp and glory of his Court such as the throne of ivory overlaid with the best gold, the three

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1 See I Kings Chap. IX.26-28; I Kings Chap. X.11;
II Chronicles Chap. VIII. 18;
III Chronicles Chap. IX.10.

2 Lassen identified Ophir with the Aberia of Potlemy, the Ābhīra of Sanskrit Geographers, the district bordering on the mouths of the Indus. Vide JRAS for 1898 p. 253. Cunningham identified Ophir with Sauvīra, the country near Mount Abu (Ancient Geography p. 496-7). Many have identified it with Sopara. Mr. Aiyangar (Ancient India p. 368) identifies it with Beypoor on the Malabar Coast. If Ophir is to be looked for in India it seems highly probable that it is Sopara. Sopara figures very largely in the Jātaka stories (e. g. Jātaka No. 453). A fragment of Aśoka's eighth edict was found at Sopara (Vide I. A. Vol. 17 page 295).

hundred shields of beaten gold, the spices, the apes and peacocks brought in by the navy of Tharshish once in three years, and also almug trees of which he made pillars for the house of the Lord (I Kings Chap. X 11-12, 15, 17, 18, 22) can only be traced to India. Leaving aside these regions of conjecture we can establish with a great degree of probability that from the 6th century B. C. the western coast of India was in close communication with Babylon and countries in the west.[3] The Bāveru Jātaka (Cowell Vol. III, p. 83, No. 339) bears witness to an early export trade with Babylon. Several other Jātakas (e. g. No. 463) mention Bharukachchha (modern Broach) and Śūrpāraka. In the Sussondi Jātaka we have a reference to merchants of Bharukachchha setting sail for the Golden land.[3A] Strabo[4] says that he saw 120 ships sail from Myos Hormos to India, the former being the emporium of the Egyptian trade with India. The Pāṇḍyas in the extreme south of India are referred to by Megasthenes in his Indika and Ceylon seems to have been referred to by him as Taprobane[5] (Tāmraparṇī). The Gautamadharmasūtra (10-33) and Baudhāyanadharmasūtra[5A] (I-18-14) mention the duties

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3 Vide JBBRAS Vol. 15 p. 109 and Prof. Rawlinson's 'Intercourse between India and the Western world' p 3, 11 for identifications of various Hebrew and Greek names of things with their Indian originals. Vide JRAS 1916 p. 847, for some criticism of Prof. Rawlinson's book.

See I. A. Vol. 13 p. 228 for historical account of exports of gems and metals and vol. 14 p. 274 for animals and plants known to Greek authors.

3A. Jātakas Vol. III p. 123,124 (Cowell).

4 M'Crindle's Ancient India p. 6.

5 I. A. Vol. VI. 129.

5A. Baudhāyana S. B. E. Vol. 14 p. 200; Gautama S.B.E. Vol. II. p. 228.

payable on merchandise imported by sea. A passage in the Kevaṭṭuasutta of the Dīgha (5th century B. C.) speaks of ships that went far out of sight of land with the help of a shore sighting bird. This is one of the earliest references to ocean-going ships.[5B] The description of voyages in the Buddhist books imply that the vessels employed were of large size. The ship in which Vijaya was cast adrift carried 700 of his followers (See I. A. Vol. 16 p. 7, and Geiger's Mahāvaṃśa p. 54).

The Manusmṛiti contains rules as to the interest to be taken from those that are skilful in plying the sea trade.[6] The large finds of Roman coins discovered particularly in Southern India establish that at least from the time of Augustus to the time of Nero (who died in 68 A. D.) the volume of trade between Rome and India was very large.[7] The discovery of the monsoon route by Hippalus (about 47 A. D.) gave a great impetus to the trade of India with countries in the West. Embassies are said to have been sent from Southern India to Rome[8] and Syria. Pliny (who died in 79 A. D.) contains valuable information of the exports of India[9] and about the Geography of India. He complains that India, China and Arabia absorbed between them one hundred million sesterces (calculated to represent £11,00,000 by Mommsen) per annum,

5B JRAS 1899 p. 432.

6 समुद्रयानकुशला: देशकालार्थदर्शिनः । स्थापयन्ति तु यां वृद्धिं सा तत्राधिगमं प्रति ॥ Manu. VIII 157.

7 See Mr. Sewell's article on 'Roman coins found in india' JRAS 1904 p. 591.

8 M'Crindle's Ancient India p. 212 and p. 167.

9 See M'crindle's Ancient India pp. 102-135.

half of which went to India and that Indian goods were sold in Rome at one hundred times their prime cost. Pliny speaks of Indian merchants that had been driven by storms to Germany (M'crindle's Ancient India p. 110). The Periplus of the Erythraean sea by an unknown Greek author in the first century of the Christian era contains the best account of the commerce carried on between the Western coast of India and the Red Sea. That work mentions such ports and marts on the western coast as Borugaza (Broach), Simylla (Chaul), Mandagora (probably Mandad in the Rajpuri creek), Melizeigara (?), Buzantion (Vaijayantī i. e. Banavasi) &c. Ptolemy (150 A. D.) mentions such places on the western coast as Nausaripa (modern Navsari), Sopara, Sinylla, Balepatna, Hippocoura &c. In the Kanheri caves we have a representation of a shipwreck on the sea and of two persons praying to Padmapāṇi for rescue who sends two messengers for the purpose.[10]

The western coast of India (particularly Konkan) is comparatively a poor and rugged country. If the sea-ports of the Konkan had simply exported the products of the Konkan they could scarcely have attained to any prominence. The reason why Sopara, Kalyan, Thana, Chaul rose to be very flourishing seaports is that they were connected with the fertile country beyond the Ghats by trade routes and served as the outlets for the commodities of the vast countries in the peninsula. The inscriptions and the rock-cut caves and temples at Nanaghat, Karla, Bhaja and other places establish that the passes in the Sahyādri were in the centuries immediately preceding and following the Christian era

10 Bom. Gazetteer Vol. XIV P. 165 and Mukherji's Indian Shipping II. I. A, Vol. 16, P. 49.

important trade routes and were so easy and safe that an enormous volume of trade went on through them. Puṇṇa and his merchant companions used the trade route from Suppāraka to Sewet (Śrāvastī) in Oudh. An inscription in the Nasik Caves states that Ushavadāta made boat bridges and established ferries at several of the rivers along the coast, such as Ibā, Pārādā, Damaṇa, Tāpī, Karabeṇā and Dāhanukā.[11A] Kosmas Indikopleustes (6th century A. D.) says 'In the place called Kalliana (modern Kalyan) there is a bishop usually ordained in Persia.'[11B]

In the foregoing an attempt has been made to point out indications from ancient authors, Indian as well as non-Indian, to establish that the western coast of India from Broach to Cape Comorin was the scene of great commercial and maritime activity from at least the 6th century B. C. The next step will now be to find out under what name or names the countries comprised in the strip of territory between the sea and the western Ghauts were known to ancient people. In very ancient times a large part of the western coast from Broach to Cape Comorin was known as Aparānta. It is very dfficult to determine with any degree of precision the limits of Aparānta. That it included the territory from the vicinity of Thana to Goa may be satisfactorily established. The earliest certain reference to Aparānta is in the Arthaśāstra of Kauṭilya (about 320 B. C.) The author says that the rain-fall in Aparānta and the Himalaya regions is the heaviest of all and cannot be measured in *Droṇas* while that in

11A See A. S, W. I. Vol. 4 p. 99.

11B Apostles of India by Dr. Ogilvie p. 55.

Aśmaka and Avanti is 13½ and 23 *Droṇas* respectively.[12] This description in the matter of rain-fall can only apply if by Aparānta we understand what is commonly known as Konkan. Aparānta seems to have either formed part of Aśoka's vast empire or was on the confines of it or friendly to it. A fragment of Aśoka's edicts was found at Sopara.[13] The 5th rock-edict of Aśoka refers to the Rāsṭikas, the Peteṇikas and other Āparāntas. What Aśoka means by Āparāntas is not quite clear. Mr. V. A. Smith takes the word to mean 'Other nations on my borders.'[14] M. Senart rendered it as 'Westerns.'[15] Mr. Smith's rendering is not warranted by the natural meanings of the components of the word Āparāntas. M. Senart's meaning is natural. It is not unlikely that the word is used also in the sense of "Those people that inhabit the western coast" (i. e. Konkan). The Mahāvaṇśa mentions a mission to Aparānta sent by the priest Moggaliputta Tissa about 247 B. C.[16] It is to be noted that a mission was also sent to Vanavāsi. This shows that Aparānta did not include Banavasi i. e. present North Canara and the country round about it. Though the Mahāvaṃśa was composed only in the 5th or 6th century A. D. it embodies ancient traditions and is generally regarded as faithfully chronicling events as they had been handed down. In the Kāmasūtra of Vātsyāyana the women of

12 षोडशद्रोणं जाङ्गलानां वर्षप्रमाणमध्यर्धमनूपानां देशवापानामर्धत्रयोदशाश्यकानां त्रयोविंशातिरवन्तीनामामितमपरान्तानां हैमन्यानां च कालतः। अधिकरण II p. 115 (text).

13 I. A. Vol. 17 p. 295.

14 Edicts of Aśoka p. 11.

15 I. A. Vol. 20 p. 240.

16 Mahavaṇso (Turnour) p. 71; Geiger's edition Chap. 12. pp. 82-85; See also Vinayapiṭaka (Oldenberg) Vol. 3. p. 314.

Aparānta and Lāṭa are mentioned.[17] In one of the Kanheri inscriptions mention is made "of Dāmilā, whose husband was Bhojaka, lord of Aparānta."[18] Bühler holds that the inscription is earlier than Gotamiputra Śatakarṇi I. One of the Nasik inscriptions associates Aparānta with Kukura[19]. So does the inscription of Rudradāman (150 A. D.).[20] In the latter Surāshṭra is mentioned as a country distinct from Kukurāparānta. The Milindapaṇha mentions the people of Aparāntaka and Bharukachchha.[21] In the Mahā-Bhārata we find that Arjuna goes from Aparānta to Prabhāsa, from the latter to Raivataka and thence to Dvārka.[22] In Raghuvaṁśa Kālidāsa gives a graphic description of the conquest of Aparānta by Raghu.[23] After encamping on the slopes of the two mountains Malaya and Dardura he crossed the Sahya. His vast army bent on the conquest of Aparānta spread between the sea and the Sahya mountain. Then the poet refers to the damsels of Kerala (Malabar) whose tresses were powdered with the dust raised by the march of Raghu's army. The king of Aparānta submitted to Raghu and offered him tribute. The mountain Trikūṭa in Aparānta, which Raghu's elephants butted against with their tusks, served as the triumphal column recording his victory. Then Raghu started for the conquest of the Parasīkas by the land route. These details enable us to say that Aparānta was to the north of Kerala and between the sea and the Sahya. What

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17 चण्डवेगा मन्दसीत्कृता आपरान्तिका लाट्याश्च । कामसूत्र II.

18 A. S. W. I. Vol. V p. 84.

19 A. S. W. I. IV p. 109.

20 I. A, Vol. VII p. 262 and A. S. W. I. II p. 128.

21 S. B. E. Vol 36 p. 211.

22 Ādiparva Chap : 218. 1-11.

23 See Raghuvaṁśa IV. 51-60.

its northernmost limit was is not quite clear. That Kālidāsa is unconsciously giving us the political history and geography of his own times or of times a little previous to his own is evident. Kālidāsa is generally supposed to have flourished in the 5th century A. D. Kālidāsa seems to be speaking of some dynasty that ruled over northern Konkaṇ. Pandit Bhagavanlal took Trikūṭa (Raghuvaṃśa IV 59) to be a city and identified it with Junnar.[24] Jackson pointed out that it was a mistake.[25] What mountain or hill in northern Konkan was designated Trikūṭa it is difficult to say. It is not unlikely that the Traikūṭaka dynasty, that appears to have held sway over southern Gujerat and northern Konkan from about 250 to 450 A. D. was named after the Trikūṭa mentioned by Kālidāsa. That dynasty had an era of its own, which commenced in A. D. 248-49, founded according to Fleet by an Ābhīra prince Íśvarasena.[26] A Traikūṭaka Mahārāja Dahrasena (A. D. 456) made a grant of a village to Nannaswāmi residing in Kāpura.[27] We know that Kāpura was a district on the Konkan coast where Ushavadāta granted a thousand cocoanut trees.[28] A copper plate found in one of the Kanheri caves refers to the erection of a *Chaitya* in the great monastery on Kṛishṇagiri (Kanheri) in the 245th year of the era of the Trikūṭakas (i.e. in A.D. 493-494)[29]. So it is not unlikely that Kālidāsa is speaking of some Traikūṭaka Prince. This

24 Bom. Gazetteer Vol. I. part I p. 57.

25 Bom. Gazetteer Vol. I part I p. 59.

26 J. R. A. S. for 1905 p. 566.

27 J. B. B. R. A. S. Vol. 16 p. 346.

28 See Nasik inscription No. 9 in A. S. W. I. Vol. 4 p. 102 and Bom. Gazetteer Vol. 16 p. 573.

29 Burgess and Bhagwanlal's inscriptions from cave temples in western India p. 58.

also fits in well with the generally accepted date of Kālidāsa.

The foregoing discussion has established that from the times of the Arthaśāstra of Kauṭilya, if not earlier, Aparānta denoted the Konkan coast and that it comprised the territory north of Bānavase and south of modern Surat. It will be shown hereafter that this very part of the western coast came to be called Konkan in later times. Dr. Fleet was of opinion that Aparānta included the Konkan, Northern Gujerat, Kathiawar, Kutch, and Sind.[30] Dr. Fleet is right if only the etymological sense of the word Aparānta be looked to.[31] But, as appears from the Arthaśāstra, the inscription of Rudradāman, the Mahābhārata and the Raghuvaṃśa, long established usage had restricted Aparānta to the strip of country from Karwar to Surat. Even within these narrow limits certain parts went under other distinct names. The country between Broach and Sopara was also called Lāṭa. Ptolemy says that Barygaza is in the interior of Larike which is east of Indo-Skythia along the coast.[32] Here Larike evidently stands for Lāṭaka. Navsari was the capital of the Chālukyas of Lāṭa, the dynasty being founded by Jayasiṃha Varman Dharāśraya, brother of Vikramāditya, second son of Pulikeśi II of Badami[33]. In the Mahābhārata Anuśāsana Parva (Chap. 35. 17) mention

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30 J. R. A. S. 1910 p. 427.

31 e. g. the Matsyapurāṇa Chap : 114 says 'भारुकच्छाः समाहेयाः सहसारस्वतास्तथा । काच्छीकाश्चैव सौराष्ट्रा आनर्ता अर्बुदैः सह ॥ इत्येते अपरान्तास्तु शृणु ये विन्ध्यवासिनः । 45-48.

Here the countries mentioned are called western *Janapadas*. See also Vāyupurāṇa Chap: 45. 128-131 ; Brahmapurāṇa 27-59.

32 M 'Crindle's Ptolemy p. 152.

33 J. B. B. R. A. S. Vol. 16 p. 2.

is made of the Lāṭas among Kshatriya tribes who became outcasts from seeing no Brāhmana[34]. The Mandasor inscription of A.D. 473 describes Lāṭa as a pleasing country with choice trees bowed down by the weight of flowers, with temples and halls of Gods and *Vihāras*. From a record of 888 A.D. it appears that Lāṭa was one of the divisions of Konkan[35] and from the reference to Tājikas (Arabs) who came first to Navasārikā to reduce the country it seems that Navasārikā was the capital of Lāṭa. Al Masudi speaks of Tana (modern Thana) as on the coast where the Lariya language is spoken.[36] From this it follows that Lāṭa extended up to Thana.

That part of the western coast from Karwar to Surat came to be called Konkan from comparatively ancient times, we shall now endeavour to shew by bringing together passages from various early works that speak of Konkan. Strabo speaks of a people called Koniakoi. His words are " This length is mentioned from the mouths of the Indus along the coast of the outer sea to the promontary already mentioned and its eastern limits. There the people live called Koniakoi."[37] Again he says " they say that Taprobane is an island lying out in the sea distant from the most southern parts of India, which are next to the country of the Koniakoi, a seven days' journey southwards."[38] From these details it is not unlikely that the people called Koniakoi stand for the people of the Konkan. The list of countries given in the Mahābhārata includes Konkan

34 Gupta inscriptions p. 84.
35 I. A. Vol. 13 p. 69.
36 Elliot's History of India Vol. 1 p. 24.
37 M'Crindles Ancient India in Classical writers. p. 18.
38 M'Crindle's Ancient India p. 20.

(Bhīshmaparva 9.60). The Bṛihatsaṃhitā of Varāhamihira mentions the Kaunkaṇas (16.11). A copper plate of 584 A.D. refers to Purī the capital of the Konkan (Bom. G. Vol. 14 p. 401). The Aihoḷe inscription (634 A.D.) records the fact that the Maurya rulers of the Konkan were overwhelmed by Kirtivarmā, the first Chālukya king of Badami (550-567 A.D.) and by his grand-son Pulikeśi II (610-640 A.D.)[39]. Hiuen Thsang the famous Chinese traveller speaks of a country called Kong-kin-na-pulo (Konkaṇapura) as being north of Draviḍa and about 2,000 *li* from the latter.[40] He further says that Moholach (Mahārāshṭra) was to the north-west of Konkaṇapura and about 2400 *li* from it. His description of Kong-kin-na-pulo is "this country is about 5,000 *li* in circuit. The land is rich and fertile. It is regularly cultivated and produces large crops. The climate is hot; the disposition of the people ardent and quick. Their complexion is black and their manners fierce and uncultivated." (p. 254 of Beal's Buddhist Records). In Hiuen-Thsang's Life we read "from Draviḍa he went north west in company with 70 priests from Siṃhala. After going about 2,000 *li* we come to Kinnapolo. There are about 100 Sanghārāmas here and 10,000 priests belonging both to the Great and Little Vehicle".[41] Scholars are not agreed to as to what country the Chinese traveller speaks of as Kong-kin-na-pulo. M. Vivien de Saint-Martin suggested Banavasi; General Cunningham thought

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39 I. A. Vol. 8 pp. 242, 244. कांकणेषु यदादिष्टचण्डदण्डाम्बुवीचिभिः । उदस्तास्तरसा मौर्यपल्वलांम्बुसमृद्धयः ॥

Fleet took "*Chandadanda*" to be the name of a general, but it seems that the word means no more than "fiery army".

40 See Beal's Buddhist Records Vol. 2 pp. 253-255.

41 Beal's Life of Hiuen Thsang p. 146.

that both bearing and distance pointed to Anegundi on the north bank of the Tungabhadrā.[42] Beal says that we must look for it somewhere near Golkonda. Burgess identified it with Kopal or Kokanur.[43] In this conflict of authorities, one feels extremely diffident in making one's own choice. In other Chinese accounts of India, Konkaṇapura is said to have been one day's journey from the sea.[44] This makes it highly probable that the country called Kong-kin-na-pulo is the kingdom of the Kadambas, whose capital was Banavasi in north Canara and whose domains extended over the modern Belgaum and Dharwar Districts. The reference to the climate, the soil and the complexion of the people of Kong-kin-na-pulo point to the Karṇātaka as the country through which the traveller passed, those districts being then included in the Banavasi kingdom. In the Padmapurāṇa there is a long list of countries where Konkan occurs after Chola.[45] In the Vāyupurāṇa, the Matsya and the Brahma, though the Pāṇḍya, Chola, Kerala, Vanavāsi countries are mentioned, the word Konkan does not occur. In the Sabhāparva of the Mahābhārata, Sahadeva is said to have conquered Surāshṭra, Śūrpāraka, Tālākaṭā, Daṇḍaka, Kolagiri (Kalvan in the modern Nasik district ?), Surabhīpaṭṭana, Kerala, Vanavāsi.[46] We expect here the word Konkan. It seems that Sūrpāraka is put in to represent the same country as Konkan. Leaving aside the doubtful passage of Strabo and the quotations from the Mahābhārata and the Padmapurāṇa about the date and authenticity of

42 Ancient Geography p. 552.
43 I. A. Vol. 23 p. 28.
44 I. A. Vol. 9 p. 23.
45 Chap : 6-55.
46 Sabhāparva Chap : 31. 65-70.

which there may be room for argument, it is clear that at least from the 6th century A.D. the word Konkan had come to be well known as the designation of the country that now goes under the same name. How much earlier it came into general use it is not possible to say in the present state of our knowledge.[47]

Extent and Boundaries of Konkan.

It is always extremely difficult to fix with precision the extent and boundaries of ancient countries. In the case of the Konkan its western boundary is the sea and its eastern boundary also is to some extent definite, namely, it is the Sahya mountain. It will, however, be shown later on that Konkan seems to have included some territory even beyond the Sahya. The difficulty lies in fixing its northern and southern limits. A grant of the Rāshṭrakūṭa Akālavarsha Kṛishṇarāja dated Sake 810 (i.e. 888 A. D.) describes how the king on the occasion of a Solar eclipse, or after having bathed in the Narmadā granted a village to the east of Variavipaṭṭana in the district of Variavi in the Konkan country. Variavipaṭṭana is to be identified with a large village called Variav on the Tāpī near Surat. This shows that Konkan extended towards the north right up to the Tāpī. Even in these days the Damanganga River is looked upon as the northern boundary of the Konkan. We saw above that northern Konkan from Sopara and Thana was included in Lāṭa. Navasari (Sanskrit Navasārikā, the Nausaripa of Ptolemy) was the capital of Lāṭa.[48] The Navasari grant of 739 A. D. tells us

47 See E. I. Vol. 4 p. 181. One of the mythical remote ancestors of Nripatungadeva is Konkaṇika, which seems to be a reminiscence of Konkaṇi who is believed to have been the ancestor of the western Gangas.

48 M'Crindle's Ptolemy, p. 39.

how in the time of Vikramāditya II of Badami a formidable force of Tājikas (Arabs) overran Sind, Kutch, Kathiawar and Gujerat and desiring to enter the Deccan came to Navasari but was routed by the feudatory Chālukya prince Avanijanāśraya Pulikeśi.[49] If, as shown above, Lāṭa was a province of Konkan, it is natural to suppose that Konkan extended up to Navsari if not beyond. A town called Hanjamana or Hanyamana is mentioned as situated in the Konkan and as being under the rule of the Konkan Śilāhāras.[50] It is to be identified with Sanjan where the ancestors of the present Parsees are said to have first landed. Al Idrisi (12th century A. D.) says "Sindan is about a mile and a half from the sea. It is populous and the people are noted for their industry and intelligence. They are rich and of a war-like temper. The town is large and has an extensive commerce both in exports and imports."[51] Al Istakhri says "Between Surabaya and Sindan about 5 days. From Sindan to Saimur 5 days".[52] Ibn Haukal says that Sindan is about a *Parasang* from the sea and that the journey from Subara to Sindan takes ten days and from Sindan to Saimur (Cheul) five.[53] The above discussion makes it clear that the Northern limit of Konkan was the Tāpī.

The greatest divergence of views prevails as to the southern boundary of Konkan. Grant Duff (History of the Mahrattas p. 5) considered that Konkan extended along the coast from the Tāpī to Sadashivgad and

49 Bom. G. Vol. I part 2 p. 375.

50 I. A. Vol. 9 p. 35 the Kharepatan grant of Ananta of Anantadeva dated Śake 1016 (i. e. 1094 A. D.) and I. A. Vol. 5 p. 278 the inscription of Chittarājadeva.

51 Elliot Vol. I p. 85.

52 Elliot Vol. I. p. 30.

53 Elliot Vol. I p. 39.

inland as far as the open plains of the Deccan and included in it parts both of Gujerat and Kanara and of the country above the Ghats. The latter he called Konkan Ghatmatha as opposed to Talkonkan. He inferred that the Mussulmans restricted it to the lower country. Some Indian writers make Gokarṇa, 25 miles south of Karwar, the boundary between Konkan and Kerala, the latter being regarded as stretching south either to Tinnevelli or Cape Comorin.[54] In the Sahyādrikhaṇḍa we are told that the territory reclaimed from the sea by Paraśurāma extended from Cape Comorin to Nasik.[55] In another place the same work includes Gokarṇa in Konkan (Uttarārdha Chap : 6.50). At present Konkan is held to include all the land between Daman in the north to Terekhol on the Goa frontier in the south and is generally divided into two parts, north Konkan and south Konkan. It is evident that at one time Goa was looked upon as the Capital of the Konkan. Mādhavāchārya, the famous minister of Harihara of Vijayanagar, in making a grant of the village of Kuchara (modern Kochare in Savantwadi) in Śake 1330 (1391 A. D.) speaks of Goa as the Capital of Konkan.[56] A king Jayakeśi in the line of the Kādambas of Goa was subdued by Vikramāditya Chālukya, son of Āhavmalla and made an alliance with the Chālukya king by marrying his grand-son to Malladevī, daughter of Vikramāditya. This Jayakeśi is spoken of as the king of Konkan.[57] From the fore-

54 Bom. Gazetteer Vol. I part 2 p. 75.

55 देशमालोकायामास त्यक्तं वारिधिना तदा । सह्यपर्वतमारभ्य योजनत्रितयावधि ॥ कन्याकुमारी चैकत्र नासिकाऽत्र्यम्बकः परः । सीमारूपेण विधते दक्षिणात्तरत : शुभौ ॥ सह्याद्रिखण्ड उत्तरार्ध chap 7. 28–29.

56 J. B. B. R. A. S. Vol. 4 pp. 107, 115.

57 Compare विक्रमाङ्कदेवचरित v. 25 'एनमेष जयकेशिपार्थिवः प्रार्थितादधिकमार्पयद्धनम् । निश्चलामकृतहासचन्द्रिकां कौङ्कणप्रणयिनीमुखेन्दुषु ॥' see J.B. B.R.A S. vol. 9, p. 242.

going it is evident that Konkan included towards the south the Goa territory at all events. It is likely, as Hiuen Thsang's account suggests, that it extended as far as the kingdom of Banavasi, the country beyond the latter towards the south being called Kerala or Malabar. When parts of the country beyond the Ghats came to be ruled over by Konkan kings, such tracts were often spoken of as included in Konkan. The Śilāhāras ruled over southern Konkan and also the Mirinja (modern Miraj) country.[58]

The Sub-Divisions of Konkan.

From very ancient times the Konkan has been divided into seven regions. The Miraj plate of Sake 946 (1024 A. D.) tells us that the Chālukya king Jagadekamalla after having deprived the king of the seven Konkaṇas of everything started for the conquest of the north and encamped near Kolhapur.[59] These indications make it clear that the ruler of the seven Konkaṇas referred to must be a Kādamba king of Goa. The Prasannarāghava of Jayadeva alludes to the divisions of Konkaṇ into seven provinces.[60] What the names of these seven divisions were it is extremely difficult to say. One thing is clear. From very ancient times, epigraphic records speak of two Konkaṇas, the one containing 1400 villages and the other 900. The Konkaṇ 1400 represents that country, the capital of which was Purī and which included Hanja-

58 A record of 1110 A. D. describes the महामण्डलेश्वर गण्डरादित्य as reigning over the मिरिञ्ज country together with the seven Khollas and Konkan. J. B. B. R. A. S. Vol. 113 p. 6.

59 I. A. Vol. VIII p. 18.

60 दक्षिणस्याम्बुधेर्मध्ये कृत्वा कोङ्कणमष्टमम् । मद्बाणजन्मा दहनो लङ्कातङ्काय जायताम् ॥ प्रसन्नराघव IV.

mana (Sanjan) Sopara, Thana, Kalyan and Chaul i.e., northern Konkan including the districts of Thana and Kolaba and parts of Ratnagiri. A king Chittarāja-deva of the Śilāhāra dynasty is styled in a grant dated 948 Sake (1026 A. D.) the ruler of the 1400 Konkan villages chief of which were Puri and Hanjamana.[61] The Kharepaṭan copperplate speaks of the Śilāra Anantapāḷa as ruling over the whole Konkaṇa 1400 villages in 1096 A. D.[62] It records the grant of exemption from tolls for all carts belonging to the great minister Bhābhana Śreshṭhin, son of the great minister Durgasreshṭhin of Valipavana, and that his carts were to come into any of the parts of Śreshthānaka (Thana), Nāgapura (?), Śūrpāraka (Sopara), Chemulya (Chaul) and others included in Konkan 1400. The Konkan 900 is the province over which the Kādambas of Goa ruled.[63] These two viz: Konkaṇa 1400 and Konkaṇa 900 are undoubtedly two of the seven divisions of Konkan. Scholars are not agreed as to what the names of the seven divisions were.

Prof. Wilson (probably relying upon corrupt passages of the Sahyādrikhaṇḍa explained the seven Kerala, Tuluva, Govarāshṭra, Konkana (proper), Kerataha, Varalatta and Barbara.[64] Dr. Gundert's Malayalam dictionary on Konganam enumerates Kārāṭa, Virāṭa, Mārāta, Konkaṇa Havyaga, Taulava and Kerala as the seven Konkaṇas. Fleet thought that the above list was imaginative, except as to the last three. He proposed the divisions as follows:—Payve, Hayve or Haive 500 (north Canara) was the first division ; then

61 I. A. Vol. V, 278.

62 I. A. Vol. IX p. 41.

63 Bom. Gazetteer Vol. 12 p. 452.

64 Bom. Gazetteer Vol. 1 part II p. 282 n 5.

Konkan 900, which he was inclined to identify with the Revatīdvīpa of the Aihoḷe Inscription; then Iridige (corresponding to Savantvadi and Ratnagiri), which is called Mahāsaptama in a record of 705 A. D.[64A], then Konkan 1400 of the Śilāhāras and then Lāṭa. In the Sahyādrikhaṇḍa the seven divisions given are Kerala, Tulanga, Gorāshtra (Goa), Konkaṇa, Karahāṭa, Karanāṭa and Barbara.[65] The passage is evidently corrupt.

Apart from these main divisions, epigraphic and other records mention several other districts in Konkan.

A grant dated in expired Kali year 4270 of the Kādamba Sivachittaparmāḍi speaks of a Palasideśa and a Kampaṇa (district) in it called Kālagiri.[66] Palasideśa seems to be the same as the Palasige 12000 province, which comprised the present Belgaum district. The chief city was called Palāśikā or modern Halsi, 10 miles south east of Kharsapur. It is not unlikely as said above that when the Kadambas ruled over Belgaum and Goa, Palasige was looked upon as a Konkan province.

Revatīdvīpa is often spoken of in the epigraphic records. A grant of Pulikeśin II dated in the 5th year of his reign (i. e. A. D. 614) found in the Malvan Taluka refers to a village Pirigipa in Revatīdvīpa.[67] The Chālukya Mangalīśa (one of whose grants is dated Śake 500) is said to have conquered Revatīdvīpa in the western sea. Dr. Bhandarkar identifies Revatīdvīpa

64A I. A. Vol. 9 p. 131. See also p. 129 for one of the Nerur plates of Chālukya Vijayāditya dated 700 A. D. which says that the village Nerur is in the Iridige District.

65 सह्याद्रिखण्ड उत्तरार्ध Chap : 6. 47-48.

66 J. B. B. R. A. S. Vol. 9 p. 279.

67 I. A. Vol. 14 p. 330.

with Reḍi, a few miles to the south of Vengurla.[68] Fleet says that Dr. Bhandarkar is wrong in calling Revatīdvīpa an island. He says that 'dvīpa' is used in a broad sense in which it also occurs in Kāpardikadvīpa and he identifies Revatīdvīpa with the Konkan 900.[68A] But the Kauṭheṃ plate of Vikramāditya V dated Śake 930 (i. e. A. D. 1008) shows that Revatīdvīpa was an island.[69] It may be admitted that the country round about the island of Revatīdvīpa came to be called by the same name.

In a grant of the Śilāhāra Bhoja dated Śake 1113 (1191-92 A. D.) the village granted, Viz : Kaseli, is described as being in the Aṭṭavire-Kampaṇa. Kaseli is a village near Adivare in the Ratnagiri District and Aṭṭavire is evidently Adivare.[70]

Jayakeśin I, a Kādamba of Goa, is described as Death to the king of Kāpardikadvīpa. Kāpardikadīvpa seems to be the kingdom of the northern Śilāhāras, probably extending from Rajapur to Sopara and Sanjan. It was so called after Kapardin I or II one of the northern Śilāhāra kings. The Kadamba king Jayakeśin II of Goa is said to have held the whole Konkan including Kavaḍidvīpa lakh and quarter.[72] It appears that Kavadidvīpa is a corruption of

68 Bom. Gazeteer Vol. I part 2 p. 181,

68A Bom. Gazetteer Vol. I part 2 p. 347 note 2.

69 I. A. Vol. 16 p. 15, 22 'सर्वद्वीपाक्रमणमहसो यस्य नौसेतुबन्धैरुल्लंघ्याब्धिं न्यधित पृतना रेवतीद्वीपलोपम् ॥'

'whose army after crossing the sea by a bridge of boats caused (or brought about) the disappearance of Revatīdvīpa (as an island)'.

70 See report of the भारत-इतिहास-संशोधक-मण्डल for Śake 1835 p. 220.

71 J. B. B. R. A. S. Vol. 9 p. 266.

72 Bom. Gazetteer I part 2 p. 283 note and 452.

Kāpardikadvīpa. As it is said to be quarter and a lakh province, it must have been a very large country. Even then the figure seems to be extremely exaggerated.

There is frequent mention of a district called Kāpura. It seems to have been on the western coast from Sopara to Sanjan. In one of the Nasik inscriptions of Ushavadāta mention is made of the gift of 8,000 cocoanut trees in the village of Chikhalapadra in the district (Āhāra) of Kāpura.[73] In the grant of the Traikūṭaka Dharasena dated 207 of the Traikūṭaka era (i. e. 456 A. D.) the donee Nannasvāmi was a resident of Kāpura.[74]

In the Kharepatan grant of Śake 930 we have a district called Kandalamūliya which probably stretched from Chaul (Chemulya) to Bassein. The name seems to be significant. It probably refers to the large groves of plantain trees that even now are a special feature of Cheul and Bassein. The town Chandrapura mentioned in the same grant as included in Kandalamūliya is probably the modern Chembur. It is probable that the Kaṇḍavalāhāra district mentioned in the Navsari grant is the same as the Kandalamūliya district of the Kharepatan grant.[75]

The famous city of Sopara was the chief place of a district called Soparakāhāra. In one of the Kanheri inscriptions there is mention of it.[76] From a record of Chhittarājadeva Śilāhāra we learn that the district of Shaṭshashṭi (modern Salsette) was included in the

73 A. S. W. I. IV p. 102; Bom Gazetteer Vol. 16 p. 572.
74 J. B. B. R. A. S. 16 p. 346.
75 J. B. B. R. A. S. Vol. 16 p. 3.
76 A. S. W. I. Vol. 5 p. 76, No. 5.

Thana province.[77] In many of the Kuḍā inscriptions near the Rajpuri creek we often meet with the form Saḍageriya or Sāḍageriya which is probably to be connected with Shaṭshashṭi.[78] In an inscription of the Konkanchakravarti Aparāditya dated Śake 1109 (1187 A. D.) reference is made to a village Māhavali in Shaṭshashṭi.[79]

The Navasārikā district is spoken of in a grant of Pulakeśi Chālukya of Gujerat dated 738-9 A. D.[80]

In a grant found near Goa of Śake 532 (610 A. D.) the gift of the village of Kārellikā in the district of Kheṭa is mentioned.[81] Prince Kākusthavarmā of the Kādamba family gave away while in Palāśikā a field in a village called Kheḍa [82] It is not quite clear what district is meant by Kheṭa. Probably it is identical with Khed in the Ratnagiri District.

The Bhādāna plate of Aparājita dated Śake 919 (i. e. 997 A. D) speaks of a Māhirihāra district (Vishaya) in Konkan 1400. This district comprised the modern town of Bhiwandi near Kalyan,[83] as the placės mentioned therein can be identified with certain villages near Bhiwandi.

THE ORIGIN OF THE NAME KONKAN.

It is said in the Imperial Gazetteer (Vol. 15 p. 394) " The term Konkan seems to be of Dravidian origin

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77 I. A. Vol. 5 p. 278.

78 Burgess and Bhagwanlal's cave temples p. 4 and p. 9; A. S. W. I. Vol. 4 p 84.

79 J. B. B. R. A. S. Vol. 12 p. 333.

80 Bom. Gazetteer Vol. I part I. p. 109 N. 2.

81 J. B. B.:R. A. S. Vol. 10. p. 365.

82 J. B. B. R, A. S. Vol. 9 p. 235.

83 E. I. Vol. 3 p. 267.

[F. O. C. II 49.]

but has not so far been satisfactorily explained." Before proceeding to discuss the origin of the name of Konkan it is necessary to dwell upon one or two points. In the first place various forms of the name present themselves, though the form Konkaṇa is the most frequent. Even in the same record one meets with two different forms of the name. For example, in the Kharepatan grant we have the form Konkaṇa and also Kunkaṇa twice.[84] The commentator of the Kāmasūtra uses the form Kunkaṇa.[85] In the Gaṇadharasārdhaśataka of Jinadatta (Saṃvat 1211 i. e. 1155 A. D.) we have the form Kunkuṇa.[86] Mankha (1135-11-45 A. D.) in his Śrīkaṇṭhacharita speaks of an embaassy sent by Aparāditya king of Kunkuṇa to Kashmir.[87] If we turn to Mahomedan writers, we shall find a variety of forms. Alberuni speaks of Tana as the capital of Kunkan.[88] Al Masudi, who died in 956 A. D., says "this country is also called Kamkar. On one side it is exposed to the attacks of the king of Juzr (Gujerat)."[89] Ibn Batuta (1340 A. D.) and Rashi-ud-din used the form Konkan-Tana. Other

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84 I. A. Vol. 9 p. 35.

85 'कुङ्कणविषयात्पूर्वेण वनवासाविषय:' on the sūtra 'मध्यमवेगा: सर्वसह्यवानवासिका:'

86 I. A. Vol. 11 p. 293.

87 'वचोभिर्नुनुदे दन्तद्युतिश्रीखण्डपाण्डुभि:। वादिनां वादिदर्पोष्मायेनशूर्पारकाध्वसु ॥ यंश्रीमदपरादित्य इति दूत्यप्रसिद्धये । प्रजिघायघनश्लाघ: काश्मीरान्कुङ्कुणेश्वर: ॥ chap. 25. 109–110.

It is remarkable that Kashmir though so distant from Konkan was in close touch with it. The commentary of Aparārka, king of Konkan, on the Yajnavalkyasmṛiti was received as an authority in Kashmir. Pratīhārendurāja, commentator of Udbhaṭa's work on Poetics, was an inhabitant of Konkan and became a pupil of Mukula.

88 Alberuni (Sachau Vol. 1 p. 203)

89 Elliot's history of India Vol. 1 p. 25.

Mahomedan writers employ the forms Kemkem, Komkam and Kankan. These different forms of the name increase the difficulty of the task of finding out the origin of the term Konkan. Another circumstance that is worthy of note is that in numerous grants and inscriptions found in the Konkan, the important ministers of state as well as the donees have names that more or less seem to be Dravidian. For example in the grant of the Rāshṭrakūṭa Akālavarsha Kṛishṇarāja dated Sake 810, where the village granted was on the Tāpī the name of the *Dūtaka* and Mahattamasarvādhikarī was the Brāhmaṇa Ullaiyaka or Allaiyaka.[90] Similarly in the inscription of the Śilāhāra Chittarājadeva recording the grant of a village in Salsette, the names of the donee Amadevaiya, of the *Sarvādhikārī* Nagaṇaiya, of the Minister for peace and war Sīhapaiya indicate that they were all southerners.[91] In the Bhādāna plate of Aparājita the names of most of the people in whose hands water was poured when making the grant of the village to the temple of Loṇāditya, viz: Vāpaiya Śreshṭhin, the Bhojaka Chelapaiyu, the Brāhmaṇa Govaṇaiya, point towards the south as their native place.[92] It has often been argued from these facts that the Kanarese language was spoken up to the Tāpī in the Konkan and up to the Godāvarī in Mahārāshṭra and that the population of the Konkan also was more or less Kanarese. It seems however, that the facts to be gathered from the epigraphic records furnish far too slender a basis for such an hypothesis. There is another and perhaps a more natural and satisfactory explanation. It is to be remembered that the over-

90 I. A. Vol. 13, 65, 67.

91 I. A. Vol. 25 p. 278.

92 E. I. III p. 267.

lords of the Konkan from the 6th century onwards were the Chālukyas of Badami, the Rāshṭrakūṭas of Mānyakheṭa and the Chālukyas of Kalyānpura and that Konkan was ruled by the Śilāhāras who styled themselves Mahāmaṇḍaleśvaras (great feudatories) of the above mentioned imperial houses. Now Badami and Mānyakheṭa are in the heart of the Kanerese country. It is quite natural that as the victorious arms of the Chālukyas and the Rāshṭrakūṭas advanced in the Konkan Kanerese Brāhmaṇas residing at the centre of Government followed in their wake in various capacities. Hence is it that the ministers and the donees even in Konkan grants are southerners. Further it seems that even the Śilāhāra rulers of the Konkan were not natives of the soil. One of their *birudas* is " overlords of the city of Tagara ". It follows therefore that the Śilāhāras cherished memories of their ancestors having been connected in the dim past with the famous city of Tagara. Tagara is one of the two important cities and marts of Dakinabades mentioned by the Periplus, the other being Paithan.[93] For many years there was a great controversy about the site of Tagara. But the researches of Dr. Fleet established that Tagara is the same as the modern Thair or Ter in the Naldurga District of the Nizam's Dominions.[94] If the Śilāhāras, the rulers of the Konkan from the 8th century to the 13th century, came originally from the Karṇāṭaka country and if the central government of their overlords was also in the heart of Karṇāṭaka, it is but natural that many of their chief ministers and advisers should be Brāhmaṇas from Karṇaṭaka. A parallel is furnished in later times by the Peshwas.

93 See Schoff's Periplus p. 43 Para. 51.

94 J. R. A. S. 1901, pp. 537-552.

The fact of the occurrence of distinictly southern names in the epigraphic records does not establish that Konkan was inhabited by a Kanarese people or that the Language there spoken by the common people was Kanarese. Some writers think that the word Konkaṇa is derived from a Kanarese word "Konku" meaning "uneven ground" with the affix *ana* added to form the name of a country as in Telingana.[95] But on closer examination this derivation will be found to be unacceptable. The Chālukyas, the first of the dynasties beyond the Ghats that had anything to do with the Konkan, turned their attention to the Konkan only in the latter half of the 6th century. It is Kīrtivarmā, the first Chalukya king (550-567 A. D.) who is described as the knight of death to the Nalas and the Mauryas, the rulers of the Konkaṇa.[96] But we saw above that the name Konkaṇ was well established in the times of Varāhamihira (first half of the 6th century A. D.). It cannot therefore be urged that it was in the time of the first Chālukya king that the term Konkan was first coined by the followers of the victorious Chālukyas to represent the peculiar physical features of Konkan. Nor can it be said that the Kādambas of Banavasi gave that name to the country over which they ruled. In the first place it has not yet been established that the Kādambas ruled over Banavasi before 500 A. D. In the second place there is no reason why the name Konkan should have been applied to the northern part of it in the Āihole inscription, when northern Konkan was never under

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95 See the Marathi monthly Lokamitra for June 1913. See also Bom. Gazetteer Vol. I part II p. 283 N. which mentions a record from Balagaṃve in Mysore where an attempt is made to connect Konkan with "Kana" a particle.

96 I. A. Vol. 8 p. 244.

the suzerainty of the Kādambas. It is well known that northern Konkan was successively governed by the Aśokan Mauryas, the Āndhrabhṛityas, the Kshatrapas, the Ābhīras, the Traikūṭakas and the later Mauryas from the 3rd century B. C. to the 7th Century A. D.[97] In epigraphic records before 600 A. D. we do not come across the word Konkan. But the early records at Kanheri, Nasik and other places use the word Aparānta or such place names as Soparaka, Chemulya, Kaliana etc. If the word Konkan is to be derived from a non-Sanskritic source, a conjecture may be hazarded that it was evolved some time between 100 to 400 A. D. either by the Kshatrapas or the Ābhīras and that the word Konkan may have something to do with the Persian word " Koh " meaning mountain.

In the Udyogaparva of the Mahābhārata we come across a list of Nāgas. Therein Kukura and Kukaṇa are mentioned.[98] Some think that the name Konkan is derived from the name of the Nāga Kukuṇa. It seems, to say the least, that this is a very far-fetched

97 It is not unlikely that the Traiūṭakas were Ābhīras.

98 Udyogaparva Chap: 103. 10.

The name Konkan occurs as Koṇ-Hānam in Early classical Tamil literature. It was included in the territory of Naman the woman-killer-Elil kairhaw. Mont d' Ely north of Cannanore was also in his Kingdom which included Tuln and Konkan. Ahananūṛa, poems referring to Nannan. The meaning of the term Koiṛ-Kānam would be, "the forest wherein it was legitimate to plunder," a tract of forest country which was a woman's land of same kind.' That this was the meaning is clear as these poems interpose "*peruin*" vast between the words. (Puranānūṛn, poems referring to Naunan). The name seems apparently to be of Tamil origin and may have denoted originally the country along the coast south of Goa, at any rate not far north of Goa for its northern limit. This name seems to have stuck onto the territory in spite of its expansion.

derivation. There is hardly anything to show that Konkan was the country of the Nāgas or that the latter were the predominant people in it at some historical period. Besides it is questionable whether the list of the names of the Nāgas is not itself suggested by the names of the countries themselves instead of the countries being designated after the Nāgas.[99]

In the inscription of Rudradāman (A. D. 150) and in the Nasik inscription of Vasishṭhīputra Pulumāvi we come across Kukurāparānta.[100] One feels the temptation of identifying Kukura with Kunkuṇa (the meaning being "that portion of Aparānta called Kukura"). That Kukurāparānta is the name of one country seems to follow from the manner in which other countries are grouped in the inscription of Puḷumāvi. In the list of countries there given (Asika - Asaka - Mulaka-Suraṭha - Kukurāparārta - Anupa Vidhabha-Ākarāvati-Rājasa) there is no *Sandhi* between Asika and Asaka, between Kukurāparanta and Anupa and between Vidabha and Ākarāvati. The intention of the engraver was apparently to keep the name of each country distinct. If therefore Kukura and Aparanta were thought to be distinct countries, there should have been no *Sandhi.* There are however serious objections against the tempting hypothesis of the identity of Kukura and Kukuṇa. In the passage of the Udyogaparva cited a little above Kukura and Kukuṇa are separately mentioned. It was believed in ancient times that each country had a guardian Nāga (*vide* the mention of the Śrīkanṭhanāga in the Harshacharita III). Besides in numerous passages of

99 I. A. Vol. 7 p. 262 and A. S. W. I. Vol. 2 p. 128.
100 A. S. W. I. Vol. 4 p. 108 ; Bom. Gaz. Vol. 16 p. 550.

the Mahābhārata the Kukuras are described as a tribe of Yādavas associated with the Vṛishṇis, the Bhojas, the Andhakas and Daśārṇas and so are connected with Kathiawar and northern Gujerat. It is therefore difficult to regard Kukura as the original of Kunkuṇa or Konkaṇa.

THE EARLY HISTORY OF THE GURJARAS.

BY

R. C. MAJUMDAR.

Various references indicate that there was a Gurjara kingdom at the beginning of the Seventh century A. C. Thus Bâṇabhaṭṭa[1] refers to Prabhâkaravardhana's successful wars against the Gurjaras, while a similar claim is advanced on behalf of Pulakeśi II in the Aihole inscription.[2] The Chinese traveller Yuan-Chwang visited a Gurjara kingdom[3] on his return journey and the inscriptions of the feudatory Gurjara chiefs of Broach claim descent from the *Gurjar-nripa-vaṁśa* indicating the existence of a royal family of the Gurjaras.[4]

Yuan-Chwang places the Gurjara kingdom about 300 miles north of Valabhi. This takes us to the Central Rajputana and a Gurjara kingdom in this locality satisfactorily explains all references about it.

It is generally assumed that the Imperial Pratîhâra Dynasty, which had its capital at Kanauj, originally ruled over this province. That may be so, but this dynasty did not exist in the beginning of the seventh century A. C. According to the Gwalior Inscription of Bhoja,[5] Vatsarâja belonged to the third generation of kings and as he is known to have been ruling in

(1) Harsha-charita translated by Cowell and Thomas, p. 101.

(2) Ep. Ind. Vol. VI, p. 6.

(3) Watters Vol. II. p. 249.

(4) Bombay Gazetteer Vol. I, Part II, p. 313.

(5) Annual Report of the Archaeological Survey of India, 1903-4, p. 277.

783-784 A. D.,[6] Nâgabhaṭa, the first king, cannot be placed further back than the beginning of the eighth century A. D. The question therefore naturally arises, what royal family of the Gurjaras ruled in Rajputana about the beginning of the seventh century A. D., and carried on wars against the House of Thaneswar in the north and the Châlukyas in the south ?

So far as the available evidence goes, there is only one direction to which we may turn for an answer. Several inscriptions testify to the existence of a Gurjara Pratîhâra line earlier than, and different from, the Imperial one, and this, I believe, to be the ruling family which is referred to in the literature and inscriptions of the Seventh century A. D.

Our knowledge of the history of this dynasty is based upon six inscriptions, *viz.*

(I) Jodhpur Inscription of Bâuka, published in J. R. A. S. 1894, p. I. The inscription is dated but the portion containing the date has been variously interpreted. Thus Munshi Deviprasad, Dr. Kielhorn and Professor Bhandarkar read the date respectively as Saṁwat 940, 4, and 894.[7]

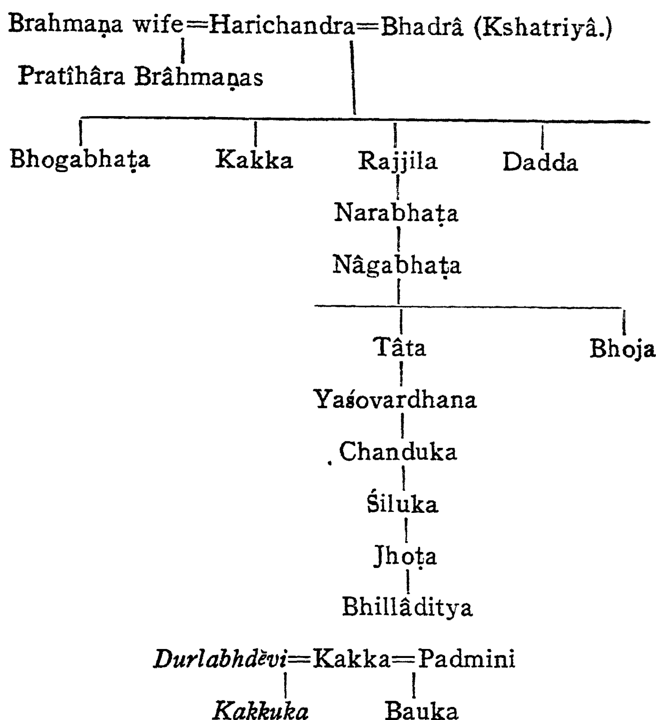
(II—VI). The five Ghaṭayâla inscriptions of Kakkuka ; of these, one was published in J. R. A. S., 1895 p. 513ff., and the remaining four in Ep. Ind., Vol. IX, p. 277ff. Three of these five inscriptions bear the date Saṁvat 918.

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(6) This follows from a passage in Jaina Harivaṁsa. Cf. J. R. A. S, 1909 p. 253.

(7) For the first two views Cf. J. R. A. S. 1894, p. 3. For the last Cf. Progress Report, Arch. Surv. W. India, 1907, p. 30 ff.

The inscription No. I, supplies us with the following geneology of a line of Kings belonging to the Pratîhâra dynasty.



The Ghaṭayâla inscriptions of the Pratîhâra Kakkuka, dated in the Vikrama year 918, confirm the above geneology, although in one of them the names are slightly modified such as Śilluka for Siluka, and Bhilluka for Bhillâditya. As they trace only the line of descent, they omit the names of the three brothers of Rajjila. They add a new name to the dynastic list viz. that of Kakkuka, the son of Kakka and Durlabha Devî. Kakkuka was thus a step-brother of Bauka.

That the chiefs above mentioned were independent rulers admits of no doubt. The inscription No. I

applies the term *râjñî* to Bhadrā, the queen of *Harichandra*, the first chief, and to *Jajjikâdevî*, the queen of *Nâgabhaṭa*, and the term *Mahârâjñî* to *Padminî*, the queen of *Kakka*. It refers to the *Râjadhâni* of *Nâgabhaṭa* and the *râjya* of *Tata*, *Jhoṭa* and Bhillâditya. The sons of Harichandra are called Bhûdharaṇakshama and *Kakka* is styled *bhûpati*, and Bâuka is called Nṛsiṁha.

The absence of pompous and high-sounding titles need not necessarily indicate, as Dr. Hoernle contends, "that the princes of this dynasty were only small chiefs."[8] For in this respect the inscription No. I bears a close resemblance to the Gwalior inscription of Bhoja I. The latter adds no royal epithet to Nâgabhaṭa, the first chief, calls the second and fourth Kings respectively as *kshmâbhṛdîśe* and *kshmâpâla* while Nâgabhaṭa and Bhoja, the greatest kings of the dynasty are introduced without any royal epithet. Whatever might be the reasons, the close parallel between these two contemporary records would preclude any conclusion regarding the subordinate rank of the chiefs under consideration on the basis of the absence of high-sounding royal epithets.

The inscriptions thus furnish us with a line of kings extending over twelve generations. Taking twenty-five years as an average for each generation, the total reign period of the dynasty would be about 300 years.[9] As the date of Kakkuka is Saṁvat 918 or A. D.

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(8) J. R. A. S. 1905, p. 28.

(9) Dr. Hoernle remarks "The two half brothers Kakkuka and Bauka formed the twelfth generation of their Pratihara dynasty. This fact, at the usual rate of twenty years for a reign, will place Harichandra the founder of the dynasty at about 640 A. D." Dr. Hoernle here overlooks the difference

861 the founder of the dynasty Harichandra may be placed at about A. D. 550. This is in full accordance with the fact that the earliest reference to the Gurjaras, to which race the Pratîhâras belonged, is carried back to the same period, by the reference in Harshacharita to the wars of Prabhâkaravardhana against them. The Province of *Gurjaratrâ*, which was named after the Gurjaras, and must therefore be looked upon as the province where the Gurjaras gained a firm footing and established themselves, was under the sway of this dynasty. This is quite evident, not only from the find-spots of the inscriptions of this dynasty which have all been found within its area, but also from the statement in the Ghaṭayāla inscription, that Kakkuka ruled in *Gurjaratrâ*. The inscription No. I also throws some light as to the period when this province was being gradually occupied by this dynasty. The verse 9 tells us that the four sons of Harichandra built a large rampart round the fort of Mâṇḍavyapura *which was gained by their own prowess* (*nijabhujârjjita*). Mâṇḍav-

between "reign" and "generation". A consideration of the well known historical dynasties such as the Pālas, the Chālukyas and the Rāshṭrakūṭas would show that the average duration of a generation must be taken to be at least 25 years.

Thus (1) Eight generations of the Pāla kings from Dharmapāla to Mahīpāla ruled from about 800 to 1025 A. D. giving an average of about 28 years.;

(2) Seven generations of Chālukya kings from Kirtivarman I to Kirtivarman II ruled from 567 A. D. to c. 747 A. D. giving an average of about 26 years.

(3) Nine generations of Rāshṭrakūṭa kings from Dantidurga to Indraraja IV ruled from 753 A. D. to 982 A. D. giving an average of 25 years.

(4) Nine generations of the Imperial Pratīhāra kings from Vatsaraja to Trilochanapāla ruled from 783 A. D. to 1027 A. D., giving an average of 27 years.

yapura is evidently Mandor, near Jodhpur. It is evident, therefore, that the Gurjaras under Harichandra and his sons had occupied the province known after them, and proceeded up to Mandor before the end of the Sixth century A. D.

The period was indeed a suitable one for such conquest. After the downfall of the short-lived empires of Mihirakula and Yaśodharman, Northern India must have presented a favourable field for the struggle of nations. The Gurjaras, who probably entered India along with, or shortly after, the Hûṇas,[10] found a favourable opportunity to press forward till they advanced as far as the Jodhpur State. Their further advance was checked by the prowess of Prabhâkaravardhana and his son, and they were therefore obliged to establish themselves in the province which was consequently named after them. Harichandra must have been the leader, or at least one of the principal leaders, of this advanced section of the Gurjaras, but in any case his dynasty was ultimately able to establish its supremacy over the entire clan. This seems to be the only reasonable inference from the circumstances stated above, and I do not know of anything which contradicts this view.

The Gurjara chiefs ruling at Broach seem to have been feudatories of this main dynasty, serving as their advance post in the south. The earliest date of the third chief of this dynasty is 928-9 A. D.[11] Allowing fifty years for the two generations that preceded him we get the date c. 580 A. D. for the *sâmanta* Dadda who founded the line. The date corresponds so very well with that of Dadda, the youngest son of Harichandra,

(10) J. R. A. S. 1909, p. 61

(11) Bombay Gazetteer Vol. I part II, p. 313.

that the identity of the two, may at once be presumed. It has been already suggested, on general grounds, that the Broach line was feudatory to the main line of the Gurjaras further north, but no link, connecting the two, has been hitherto obtained. The proposed identification would not only supply such a link but would also explain why the Gurjara inscriptions record that Dadda I was of the race of Gurjara kings (Gurjara-nṛipa-vaṁśa) although he and his descendants are referred to as *sâmantas* or feudatories. Further, it closely fits in with the theory of the Gurjara invasion dealt with above. It would appear that after Harichandra had carved a principality for himself in Gurjaratrâ and the neighbouring country, the nomadic habits of the tribe led them further south till they conquered a fair portion of Lâṭa. The necessity of preserving their own against the rising power of the Châḷukyas probably led to the foundation of a feudatory state in the southern province under Dadda, the younger brother of the ruling king Rajjila. Instances like these are furnished by the history of both the Châlukyas and the Râshṭrakûṭas.

There can be scarcely any doubt that the Gurjara kingdom visited by Yuan-Chwang belonged to this dynasty. The kingdom, according to Yuan-Chwang, was about 300 miles north of Valabhi, and Gurjaratrâ or country round Mandor exactly answers to this description. As Harichandra's dynasty was certainly ruling in the locality at the time of the pilgrim's visit, we are justified in identifying their kingdom with the one described by Yuan-Chwang. Nay, I believe that we are even able to identify the king whose court was visited by the pilgrim. "The king", says he, "is of the kshatriya caste. He is just twenty years old. He is distinguished for wisdom, and he is courageous. He

is a deep believer in the law of Buddha and highly honours men of distinguished ability." Now, as the pilgrim visited the kingdom about 100 years after the foundation of the dynasty we may reasonably expect four generations of kings to have passed away during that period and the young king may be looked upon as belonging to the fifth. On referring to the dynastic list, we find king Tâta occupying this position. The verses 14-15 of the Inscription No. 1 inform us that king Tâta, considering life to be evanescent as lightning abdicated in favour of his younger brother, and himself retired to a hermitage practising there the rites of true religion. The words *buddhvā* and *śuddha* used in these verses might have been deliberately used as an indirect hint about the Buddhist religion which he professed, but the curious coincidence about the religious fervour of the king who may be held on other grounds to have been contemporary with the pilgrim gives rise to a strong presumption about the correctness of our identification.

The Gurjaras after their settlement in Rajputana and Broach had to fight for their supremacy with Prabhâkara-Vardhana of Thâneswar who seems to have headed the native resistance against the invading hordes of the Hûṇas and the Gurjaras. We have already referred to the wars of Prabhâkaravardhana against the Gurjaras. The poetical language of Bāṇabhaṭṭa may be taken to imply that the further advance of the Gurjaras was stayed in the north. The struggle was not, however, a decisive one and seems to have been continued till the time of Harshavardhana. The feudatory Dadda II of Broach is said to have protected a lord of Valabhi against the Kanauj emperor[12] and

(12) Ibid. p. 315.

surprise had justly been expressed how a small state like Broach could withstand the force of the mighty emperor. Everything however appears quite clear if we admit Broach to have been a feudatory state of the dynasty of Harichandra and remember its hereditary enmity with the House of Thâneswar. That the Gurjaras were not worsted in their struggle with the kings of Thâneswar appears quite clearly from the fact that they retained their independence as Yuan-Chwang informs us, till at least a late period in the reign of Harshavardhana. The struggle between Dadda II and the rulers of Kanauj incidentally referred to in inscriptions may thus be looked upon as part and parcel of the great and long drawn battle between the two powers.

The extension of the Gurjara power in the south brought it into conflict with the rising power of the Chāḷukyas. It is recorded in the Aihole inscription that the Chāḷukya hero Pulakeśi II (611 to c. 640 A. D.) defeated the Lâṭas, Mâlavas and the Gurjaras[13]. The Gurjaras must here be taken to refer to the Pratîhâra dynasty under consideration, for it cannot denote the feudatory line founded by Dadda as it is included under the Lâṭas. The mention of the Gurjaras along with the Lâṭas and Mâlavas clearly show that they occupied a territory contiguous to these two provinces and the kingdom of the Pratîhâra line under consideration exactly corresponds to this. The struggle between the two powers must have been of long duration. For during the reign of the successor of Pulakeśi a branch of the Châḷukya dynasty was established in the Southern Gujerat and this was

(13) Ep. Ind. Vol. VI p. 6.

evidently to keep in check the powerful Gurjaras in the north.

The Gurjara Pratîhâra line founded by Harichandra thus established itself in Rajputana and fought successfully against the royal houses of Thâneswar and Badami. For about two hundred years they ruled in splendour over the greater part of Rajputana, but the Arab invasion of about 725 A. D. brought about a decline. The Mausari Grant[14] of Gujerat Châlukya Pulakēśi Raja dated in October, 738 A. D. tells us that Gurjaras were destroyed by an invasion of the Tajjikas or Arabs, apparently shortly before that time. There can be scarcely any doubt that the Arab invasions referred to in the grant were those undertaken by Junaid, the general of Khalif Hasham. Al Biladuri gives a short account of these expeditions and mentions, among other things, that Junaid sent his officers to Marmad Mandal, Barus and other places, and conquered Bailaman on Jurz[15]. There can be no doubt that Marmad is the same as Maru-Mara which is referred to in the Ghaṭayâl inscription No. II. above and includes Jaisalmer and part of Jodhpur state[16]. Barus is undoubtedly Broach and Mandal probably denotes Mandor. It is now a well known fact that Jurs was an Arabic corruption of the Gurjara and Bailaman probably refers to their circle of states referred to in the Inscription No. I. as *Vallamaṇḍala.* It thus appears that the Arabian army under Junaid conquered the

(14) Vienna Or Congress, Arian section, p. 230.

(15) Elliot, History of India Vol. I p. 126.

(16) Ep. Ind. Vol. IX. p. 278.

main Gurjara states in the North as well as th feudatory state of Broach in the South.

This catastrophe must have taken place in abot 725 A. D., for the expeditions were undertaken durin the Caliphate of Harham (724-743 A. D.) and Junai was succeeded by Tamim in 726 A. D.[17] It dealt deathblow to the power and prestiege of the dynasty c Harichandra and its immediate effect was the conque: of Lâṭa by the western Chāḷukya prince Avan Janâśraya Pulakēśi, who successfully resisted the Arab The remoter consequences were still more seriou Out of the deadly conflict with the Arabs emerged new Pratîhâra Power which was destined to cast th old one into the shade.

The Gwalior inscription of Bhoja records the fa that Nāgabhaṭa, the founder of the family, defeated th myriads of soldiers of the Mlēnccha king of Valav (Valava-mlēncchâ-dhipâ-kshauhiṇî). As Vatsaraja th grand-nephew of Nagabhaṭa was ruling in 783-784 A. I the latter must have flourished about the period of tl Arab expeditions referred to above. It therefo appears that shortly after the Arabs had conquered tl Gurjara states they were defeated by this new Pratîhâ chief, and if, as I suspect, Valava is identical wi the Valla over which the dynasty of Harichandra rul and which apparently was the leading state in tl Gurjara circle, known after it as Vallamaṇḍala there w apparently a successful rising of the Gurjaras again the Arabs who had conquered their territory ar occupied it with their forces. This is fully confirm by the Arab historians themselves. Thus Al Biladu says, that in the days of Tamim, who succeeded tl

(17) Elliot, History of India Vol. I p. 126.

Arab general Junaid in the year 727 A. D. "the Mussulmans retired from several parts of India and left some of their positions[18]." As the Mussulmans still retained Sind they could only have retreated from the states conquered by Junaid.

The Gurjara state was thus freed from the Muslim yoke but the balance of power was destroyed. It was natural that the new chief who won the laurels in this war of liberation should aspire to the supreme position, and a contest between his family and the dynasty that so long held the chief power was almost inevitable under the circumstances. The Inscription No. I. preserves some echo of this struggle. It tells us in verse 19, that Śiluka, who was the protector of Vallamaṇḍala and had the ensign of Umbrella defeated Devarâja, and secured the allegiance of the Bhaṭṭi confederacy. As Devarâja of the Imperial Pratîhâra line was the father of Vatsarâja who, according to Jaina Harivaṁśa, was ruling in 783-784 A. D., his date may be fixed at about the middle of the 8th century A. D. Śiluka, who belonged to the eighth generation, must have also been ruling about the same time and the identity of the two Dēvarājas may therefore be at once presumed. This presumption almost becomes a certainty when we remember that Śiluka is described as the chief of the Bhaṭṭi confederacy in the Inscription No. I. whereas Vatsarāja is said in the Gwalior inscription to have wrested the empire from the famous Bhaṇḍi clan. A careful study of the two inscriptions seems to show that Nâgabhaṭa, the founder of the Imperial Pratîhâra line successfully resisted the Arab invasion which proved so disastrous

(18) Ibid.

to the other Pratîhâra line. His successors were not slow to take advantage of this favourable situation, and Dēvarâja entered into a contest for supremacy with Śiluka. He was defeated by the latter, but his son Vatsarāja pursued his policy with signal success and wrested the empire from the family of Harichandra. These successive changes are fully reflected in the Inscription No. I. According to our scheme of chronology Chanduka was on the throne when the Arab invasion took place. It becomes therefore a significant fact that whereas he is passed over with merely conventional praises, tribute is paid to the prowess and heroism of his successor who regained the ensign of Umbrella by defeating Dēvarâja. Then, again, the two successors of Śiluka are said to have taken to religious life and not a single act of prowess or heroism is attributed to any of them. This was apparently the time when their rivals gradually established themselves in the position of the recognised suzerainty over the entire confederate clans which was so long enjoyed by them.

The line of Harichandra retained possession of their own kingdom, although they lost their supreme position and gradually seem to have reconciled themselves to their new situation. Kakka, the great grandson of Śiluka, appears to have accompanied the new suzerain power in its wars of conquest. For, we are told in the verse 24 of the Inscription No. I that he fought with the Gauḍas at Mudgagiri or Monghyr. Apparently he fought as feudatory of one of the imperial Gurjara Pratîhâra kings probably Bhoja, who is said in the Gwalior Inscriptions to have defeated the Lord of Vaṅga. The existence of the family as a ruling power can be traced to about 918 A. D. when

the Ghaṭayâla inscriptions of Kakkuka were incised but its end is involved in obscurity.

Is it not likely that the Gurjaras of Rajputana went out of existence as the imperial Pratîhâra dynasty was thrown back upon the Marudēśa by the ruling power of the Rāshṭrakūṭas ?

JĀNGALADEŚA AND ITS CAPITAL AHICHCHHATRAPURA.

BY

HAR BILAS SARDA

1. JĀNGALADEŚA.

Jāngaladeśa is mentioned in the Māhabhārata but it is not stated where it was situated (Māhābhārata, Bhishma Parva, Adhyāya 9, 39[1]). The physical characteristics of Jāngaladeśa as given in Sanskrit works (Śabdakalpadruma Kosha, Vol. II, p. 529[2]) are "Scarcity of water and grass ; high winds ; intense heat, and abundant grain production after rains." It is also stated (See Bhāva Prakāsha, and Śabdakalpadruma Kosha, Vol. II, p. 529[3]) that in Jāngaladeśa, the sky remains clear and such trees grow as require little watering for their growth ; for instance, *Śamī* (शमी) (prosopis spicigera), *Karira* (Capparis aphylla), *Bilva* (Aegle marmelos), *Arka* (Calotropis Procera), *Pilu* (Salvadora persica), and *Karkandhu*.

2. The above description shows that Jāngaladeśa must have been situated somewhere in the sandy plains of Rajputana, where, owing to comparative scarcity of rainfall, the sky is clear ; where water and grass are scarce ; where high winds blow and constantly shift sand-hills from one place to another ; where intense heat keeps the air in constant vibration during

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१ तत्रेमे कुरुपांचालाः शाल्वा माद्रेयजांगलाः ।

२ स्वल्पोदकतृणो यस्तु प्रवातः प्रचुरातपः ।
स ज्ञेयो जांगलो देशो बहुधान्यादिसंयुतः ॥

३ आकाशशुभ्र उच्चश्च स्वल्पपानीयपादपः ।
शमीकरीरबिल्वार्कपीलुकर्कन्धुसंकुलः ॥

a part of the day in the hot season; and where the principal trees are the *Śamī* (*Khejda*), (the *Karria Ker*) and the *Pilu*. A part of the present Bikaner State in Rajputana is still termed Jāngalu which is the Prākṛita form of Jāngala. The kings of Bikaner, evidently because they ruled over the country which in ancient times was known as Jāngaladeśa and a portion of which is still known as Jāngalu are called by the *Bhāts*, (the bards of Rajputana), as "*Jangaladhar Patasāh*," which means Pādshah, or king of the Jāngaladeśa. "Jai Jangaldhar Bādshah" is the inscription borne on the coat of arms of the Rulers of Bikaner, and this would show that a portion at least of the old Jāngaladeśa is incorporated in the dominions over which the Māhārajās of Bikaner hold sway.

3. Mr. Nando Lal Dey has not included in his "Geographical Dictionary of Ancient and Medieval India," the name of Jāngaladeśa, but mentions *Kuru Jāngala* as one name which he describes as :—

"A forest country situated in Sirhind, north west of Hastināpura. It was called Śrīkaṇṭhadeśa during the Buddhist period. Its Capital was Bilāspura. It was included in Kurukshetra" (p. 15).

4. This view of Babu Nando Lal Dey cannot be accepted as correct for two reasons. In the first place, there is no warrant for the assumption that Kuru Jāngala was the name of one Country, for the Māhābhārata regards Kuru and Jāngala as two separate countries (Māhābhārata, cited above). Secondly, the Kuru and Jāngala countries were never known as Śrīkaṇṭhadeśa. Bāṇbhaṭṭa in his *Harshacharita* (translated into English by E. B. Cowell M. A. and F. W. Thomas, M. A., p. 73 and note 6) gives the

name of Harsha's ancestral Kingdom as Śrikaṇṭha, by which is meant, the Kingdom of Thāneśvra.

5. The compound terms, "Kuru Jangala" and "Kuru Pānchāla" which occur in Sanskrit works, indicate a certain relationship between the two component parts of the two terms, and evidently the same relationship exists between Kuru and Jāngala as between Kuru and Pānchāla. Kuru and Pānchāla were admittedly two separate *deśa* or territories which lay adjacent to each other. Kuru and Jāngala must similarly have been two separate territories and the term Kuru Jāngala means or expresses a political, economic, or geographical unit or idea as much as the other term "Kuru Pānchāla". As Pānchāla was situated on one (the eastern) side of Kuru, it is probable that Jāngala was also situated on another side (south) of it and both Kuru and Jāngala formed one portion of Bhāratavarsha for some political or geographical purpose.

6. The physical characteristrics of Jāngaladeśa given above and the use of the term "Kuru Jāngala" lead us to believe that the country lay towards the south or south-west side of Kuru, comprising parts of the Bikaner and Jaipur States and the northern part of Mārwār territory. The road from Dwarka to Hastinapura is said to have passed all along these parts the journey terminating with the passing up of the Kuru-Jāngala in the Bhāgavata. The present day road seems to keep the same course. Kuru-Jāngala may mean Jāngala adjoining Kuru in contradistinction to other portions of Jāngala or other Jāngalas.

7. The boundaries of countries vary from time to time, and expand and contract, as the political

power of their rulers increases or decreases. It is therefore difficult to lay down with any precision, the limits of the Jāngaladeśa. We know that the Chauhāns ruled over a large part of Rajputana from the 7th to the 12th Century A. D. and that the country they ruled over was called Jāngaladeśa or Sapādalaksha (1¼ lacs). Of these two names, Jāngaladeśa is the more ancient one as, it is found in the Māhābhārata, while the other, Sapādalaksha, came into prominence only during the Chauhān times. It also appears that the Chauhāns originally ruled over the country round the town of Nāgor, for that part of Rājputana is still called "Śavāḷak" (vernacular form of Sapādalakaha). As the power of the Chauhāns increased, their kingdom expanded ; and when Sāmbhar and Ajmer became their Capitals, the whole of the country over which their rule extended came to be called Sapādalaksha or Jāngaladeśa. The eastern (or some) part of Mewar, the major parts of the present Jodhpur, Bikaner, and Jaipur States, the whole of Ajmer-Merwara and Kishengarh, were included in the Sapādalaksha country. That part of Mewar which lies to the east of Chitor and which includes the districts of Mānḍalgarh, Jahāzpur, Bijolian and others, was under the rule of the Chauhāns, when Ajmer was their Capital, and hence the Mewar fortress of Mānḍalgarh (Manḍalākara) is recorded as situated in the Sapādalaksha country. The *Dharmāmrita Śāstra* of Āshādhar, who flourished about A. D. 1230, says[4] :—

"There is a country (called) Sapādalaksha the ornament of which is Śākambhari (Sāmbhar) ; there

4 श्रीमानास्ति सपादलक्षविषयः शाकंभरीभूषण :
तत्र श्रीरतिधाममंडलकरं नामास्ति दुर्गं महत् ।
(Praśasti at the end of the work.)

is in it a great fort called Mandalākara" (Māndalgarh in Mewar); vide Dr. Bhandarkar's Report for 1883-84 on the Search for Sanskrit Manuscripts p. 390, see also pp. 103-6 of the preface.

The principal victories gained by the Chāululkya (Solanki)king, Kumārapāla, (A. D. 1143 to 1174) were three, and they were achieved by defeating, (1) Arnorāja (Ānāka or Ānā) the Chauhān king of Sapādalaksha or Jāngaladeśa, (Bombay Gazetteer, Vol. I, Part I, pp. 184-85); and (2) King Ballāla of Mālwa (ibid p. 185); and (3), Mallikārjuna, the king of Konkan (ibid pp. 185-86). The inscription of the Vikrama Samvat 1207 (A. D. 1150), found in the Mokalji's Temple at Chitor (Mewar), and published in the *Epigraphia Indica* Vol. II pp. 422-3, while describing the victory of Kumārpāla over Arnorāja (or Ānāka) the Chauhān King of Ajmer," says[5] :—

"When the King Kumārpāla had defeated the King (Ānāk) of Śākambhari (Sāmbhar, the old Capital of the Chauhāns of Ajmer) and devastated the Sapādalaksha country (line 11), he went to Śalipura (line 12) (Sālera, 4 miles from the Chitor hill), and having pitched his great camp there, he came to view the glorious beauty of the Chitrakuta (Chitor) mountain."

This war took place about Vikrama Samvat 1207 and was undertaken by Kumārpāla to avenge [6] the

5 महीभृन्निकुंजेषु शाकंभरीशः
प्रियापुत्रलोके न शाकंभरीशः ।
सपादलक्षमामर्द्य नम्रीकृतभयानकः ।
स्वयमयान्महीनाथो ग्राम शालिपुराभिधे ॥
सन्निवेश्य शिंबिरं पृथु तत्र त्रासिता सहन भूपतिचक्रम्
चित्रकूटगिरिपुष्कलशोभां द्रष्टुमार नृपतिः कुतुकेन ।

6 Indian Antiquary for 1912, p. 196.

insult and ill-treatment to which Kumarapāla's sister, Dēvalādēvi, the Queen of Arnorāja, was subjected by her husband. Dēvalādēvi was offended by some remark of Arnorāja and accused him of want of manners as he belonged to the Jāngala country. This enraged Arnorāja who gave her a kick. She left Ajmer and went to her brother who invaded Ajmer (*Kumārpāla Charita by* Jinamandanopādhyāya).

The Vīśalpur inscription of Emperor Ṛithvirāja, dated Samvat 1244 (A.D. 1187), calls [7] Ṛithvirāja the King of Sapādalaksha country. It says :—

"During the reign of Māhārājādhiraja Prithvirāja-deva in Sapādalaksha" etc. (Cunningham's Archaeological Survey Reports, Vol. VI, Plate XXI).

Merutuṅga (मेरुतुंग) in his *Prabandha Chintāmaṇi,* written in Vikrama Samvat 1361, (A.D. 1304), calls the Kingdom of the Chauhāns, Sapādalaksha in a number of places. (1) While describing the invasion of Gujrāt by the Chauhān King, Vigraharāja, between 973 and 996 A.D. Merutunga says[8] :—

"On a certain occasion the King of the country of Sapādalaksha came to the border of the land of Gujrāt to attack Mulrāja. (C. H. Tawney's translation, p. 23). (2). The Prithvirāja Vijaya (Canto V-verse 51) describes this war, as also the Hammir Māhākāvya (Canto II).

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7 समस्तराजावलीसमलंकृतपरमभट्टारक ।
महाराजाधिराजपरमेश्वर श्री पृथ्वीराज-
राजदेवराज्ये तास्मिन् काले संवत्
१२४४ श्रावणपूर्वं सपादलक्षे...

8 कस्मिन्नप्यवसरे सपादलक्षीयक्षितिपतिः
श्रीमूलराजमाभिषेणायितुं गुर्जरदेशसन्धौ समाजगाम ।

(3) The *Prabandha Chintāmaṇi*, in the course of its account of the invasion of Gujrāt by Arnorāja, undertaken (about Samvat 1200 to 1202) to support the claims of Bāhaḍa, son of Udayana, (उदयन) and the adopted son of Siddharāja Jaya Sinha, to the throne of Anhàlwārā against Kumārpāla, says that " Bāhaḍa, despising Kumārpāla, made himself a soldier of the King of Sapādalaksha country. He, desiring to make war on Kumārpāla, having won over to his side all the officers in those parts, with bribes, attentions and gifts, bringing with him the King of the Sapādalaksha country, surrounded with a large army, arrived at the borders of Gujrāt." (*Prabandha Chintāmaṇi* by Tawney, p. 121).

(4). The Dvyāśrya of Hemchandra, written about A.D. 1160, describing this war, says :—

"The Raja of Sapādalaksha whose name was Ānnā, when he heard of the death of Jaya Sinha, though he had been a servant of that monarch, now thought the time was come for making himself known " (Indian Antiquary for 1912, p. 195); also Forbes' *Rasmala* p. 142, which gives the Dvyāśrya's account of the war. Thus, while both the *Prabandha Chintāmaṇi* and the *Dvyāśrya* style Ānāk or Arnorāja as the King of the Sapādalaksha country, Someśvara in his *Kīrtikaumudi*, written about A.D. 1225, (Vikrama Samvat 1282, (Canto II Verse 46) calls this enemy of Kumārpāla " Jāngalakshonipāla " or the Lord of Jāngaladeśa[9]) while in his other work, *Surathotsava* (Canto XIV, Verse 22), he calls[10] the same Ānāji " Sapādalakshapati " " or King of Sapādalaksha."

9 जाङ्गलक्षोणिपालेन व्याचक्षणैः परैरपि (canto. II, 46);

10 दृप्तः सोपि सपादलक्षनृपतिः पादानतिं शिक्षितः (canto XV, 22)

Arisiṁha in his *Sukṛita* (सुकृत) *saṁkīrtana* (Canto II, verse 43) calls Arnorāja as "Jāngalēśa or the King of the Jāngaladēśa." It is thus clear that the Kingdom over which the Chauhāns of Ajmer ruled was called Sapādalaksha as well as Jāngaladeśa; that *Sapādalaksha* and *Jāngaladesa* were not two separate countries but one and the same country, and that the country known in ancient India as Jāngaladeśa came in latter times to be called Sapādalaksha. That the country continued to be called Siwālak—the Hindi rendering of Sapādlaksha—even during the Pathān times is clear from the *Talevāti Nasiri*, which always terms the territory of Nāgor as Siwalak country.

II. THE CAPITAL OF JĀNGALADEŚA.

The name of the Capital of Jāngaladeśa is not recorded. Rai Bahadur P. Gauri Shanker Hira Chand Ojha, during a visit paid in 1905 A. D. to Māndal (in Mewar) to see the collection of manuscripts and copies of old inscriptions, left by Yati Gyānchandra, *guru* of Colonel James Tod—the illustrious author of the *Annals and Antiquities of Rājasthan*, found in the collection, a paper containing the names of 26 different countries and their Capitals. No. 10 on that list is Jāngaladeśa and its Capital (or principal town) is stated to be "Ahichhatra". Now, there are more towns than one which bear this name : *vide* Bombay Gazetteer, Vol. I, Part II, 560, note 11. The best known town which bears this name and which the famous Chinese Pilgrim Hinen Tsiang calls "O-hi-ch-ta-lo" (*Buddhist Records of the Western World*, Vol. I, p. 200) was the Capital of the northern Pānchāla country, the ruins of which were stated by General Cunningham (Cunningham's Archæological Survey Reports Vol. I, p. 255) to

be still existing near Rāmnagar, 20 miles from Badāun in the United Provinces. This Ahichhatra, however, could not have been the Capital of Jāngaladeśa. The Capital of Jāngaladeśa must have existed somewhere in the heart of Rajputana.

The geneologies of the Chauhān Rulers of Sambhar and Ajmer declare that the founder of that family was one Vāsudeva and his first visit to Sāmbhar or Śākambharī is described in the third and the fourth cantos of the Epic Poem, *Pṛithvirāja Vijaya*, the most reliable work on the early history of the Chauhāns.

" Vāsudeva one day went on a hunting expedition. Being impelled by good omens, he had a lofty palace built there which no one else was allowed to enter. One day, after spending the mid-day in the hunt, he retired to his palace, where he found a divine being, decked in jewels, sleeping on his bed. The King was very much surprised, and inferred that the sleeper was a Vidyādhar from a magic pill which slipped from the sleeper's half-open mouth and rolled towards the King's feet. Suddenly the Vidyādhar awoke, and as the power to fly in the air which these celestial beings possess depends on the possession of the pill, he was disconsolate at losing it. The King offered him the pill at which the Vidyādhar complimented him on his magnanimity in not having taken advantage of his sleep to get possession of a charm of such power, even when lying at his feet. He then told the King that his father was a Vidyādhar named Śākambhar, whose devotions in that forest had pleased the goddess Pārvati so much that she resided there under the name Śākambharī ; that the speaker often paid visits to the shrine, the fruit of which he had obtained in

meeting such a high minded personage as the King. He then told the King to send away his army, and at sun-set to plant his lance in the ground and ride away towards his capital without ever looking back, adding that that would be some small recompense to the King for his favour to the Vidyādhar. Saying this, the Vidyādhar vanished. The King did as he was told. While he was riding away at full speed he heard the sound of ocean's waves behind him, and forgetting the advice of the Vidyādhar he looked behind to see what was following him. The Vidya-dhar appeared, this time in the sky, and said that that was to be a salt-lake.

Kurukshetra (five Yojans=40 miles in extent) conferred benefit in the next world only, while the Salt-Lake would bring renown to the King's line, as it would yield advantages in both the worlds. He added that the goddess Śākambharī and Āsapuri, the family deity of the King, would keep up the lake, which would always remain in the possession of his family. The Vidyādhar then disappeared, having first pointed out to the King that he had come to the shrine of Śākambhari, to whom he should now go to pay his respects. The King dismounted and tasted water of the lake, and having spent the night not very far from the feet of the goddess, started for his Capital the next morning."

This account of the origin of the Salt-Lake of Śambhar shows that Vāsudeva had come to that place from some distance, that the journey had caused him fatigue, that he had been a stranger to the name Śākambharī, that Śākambharī or Sāmbhar was not the Capital of the Chauhāns till Vāsudeva's reign

and that the Chauhān Kings came to be called "Śākambharīshwara" (Lord of Śākambharī) sometime after Vāsudeva's reign. We have now to see which town was the residence of the Chauhān Kings before Śakambharī became their Capital. In the Chauhān geneologies, the name of Śamantarāja (or Samanta) comes next to Vāsudeva, but whether Sāmanta was a son of Vāsudeva or only a successor, is not recorded. The *Pṛithvirāja Vijaya* too (Sarga 5, Sloka 7) mentions Sāmantaraja and says that he was Vāsudeva's kinsman and successor.

The Bijolian Rock inscription of the time of the Chauhān King *Someśvara* dated the Phalgun Vadi 3rd, Samvat 1226 (A.D. 1170) gives the Chauhān geneology from Sāmanta to Someśvara and states that the Capital of Sāmanta was Ahichhatrapur. (Journal of the Asiatic Society of Bengal, Vol. LV, Part I, page 41). The Pṛithviraja Vijaya's account of Śākambharī has already shown us that Vāsudeva's Capital was some town other than Śākambharī, and that it was situated at some distance from it. We have now the following facts before us :—

(1) That the Capital of Sāmantraja was Ahichhatrapura ;

(2) that Ahichhatrapura was a town distinct from Śākambharī ;

(3) that Ahichhatrapura, the Capital of the early Chauhāns, was situated at a distance from Sāmbhar but within a day's hard ride from it. The town that best answers to this description is Nagor (in Mārwār) which is an abbreviated form of Nāgapura. This town is situated at a distance of about 65 Miles to the northwest of Sāmbhar. The name of

Nāgapura means the same thing as Ahichhatrapura (Nāgapura means 'the city of the Serpent'; and Ahichhatrapura, the city whose *chhatra* or protector is the serpent). Nāgapura and Ahichhatrapura are thus synonyms. In Sanskrit, different names having the same significance are sometimes given to the same object. For instance, while the Harsha stone inscription of A.D. 973 calls the successors of the Chauhān King Gūvaka as Chandrarāja (Epigraphia India Vol. II p. 117), the Bijolian Rock inscription of A.D. 1170 (quoted above) calls him "Śaśinṛipa," both meaning the "Moon King."

The first Capital of the Chauhān Kingdom of Sapādalaksha must therefore have been Nāgapura or Nāgor. The territory round Nagor is still called "Śvāḷak" (Sapādalaksha) by its people, and as Jāngaladeśa is the ancient name of Sapādalaksha territory, its Capital Ahichhatrapura was no other town than the modern Nāgor in Mārwār, which is a place of great antiquity.

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TECHNICAL SCIENCES.

A NOTE ON SIṀHA-BHŪPĀLA, THE REPUTED AUTHOR OF A COMMENTARY ON THE SAṀGĪTA-RATNĀKARA.

BY

P. R. BHANDARKAR.

In his introduction, the author of the Saṁgīta-Ratnākara mentions the names of several writers on music and dancing, but with the exception of a recension of the Bhāratīya-Nāṭyaśātra and a small tract called Nāraḍīya-Śikshā, their works are not yet available. This has made it impossible to follow the development of those arts. The only parts by which these non-extant works are known to us are the quotations from them found in the commentaries on other works such as the Saṁgita-Ratnākara. Of these commentaries the one by Kallinātha,[1] who lived about the middle of the fifteenth century, has been published in the Ānandāśrama Series. The first *adhyāya* of another was printed and published at Calcutta in 1879. In the introductory verses of this the name of the author is given as सिंहभूपति, श्रीसिंहभूप or सिंह. In this edition at the end of each division of the *adhyāya* occurs the Colophon—इति श्रीसिंहभूपालविरचितायां संगीतरत्नाकरटीकायां संगीतसुधाकराख्यायां........................This commentary is in certain places better than that of Kallinātha, but its special value lies in the quotations from older authors cited in it. Who was this सिंहभूपाल and when did he flourish? The editors of the printed book say in the preface that he "lived some time between the

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1 R. Simon, *Quellen Zur indischen Musik* Z. D. M. G. 1901, 131. Mr. R. Ramasastry says that Kallinātha wrote this commentary in 1553, A. D., but has not mentioned his authority (vide *The Indian Music Journal* Vol. I, p. 32).

twelfth and the thirteenth century", without giving grounds for the statement.

R. G. Bhandarkar in his report on the Search for Sanskrit Manuscripts for 1882-83 says :—" The last of the four is a commentary on the Saṁgīta-Ratnakāra. (No. 406)..............The commentary is attributed to a King of the name Siṅga, who is spoken of as the supreme sovereign of the Āndhra circle. Who this Siṅga was it is difficult to say ; but it is not unlikely that he was the Yādava prince Siṅghaṇa who reigned at Devagiri..............A commentary on this work (the Saṁgīta Ratnākara of Śārṅgadeva), therefore, written either by himself (Śārṅgadeva) or some other court dependant may have been dedicated to the King". Similarly in his *Early History of the Dekkan* he says :—" There is a commentary on this work (the Saṁgīta-Ratnākara) attributed to a King of the name of Siṅga who is represented as a paramount Sovereing of the Andhra circle. This Siṅga appears in all likelihood to be Siṅghaṇa ; and the commentary was either written by him or dedicated to him by a dependant, as is often the case".[2] The printed book, however contains a quotation from Kallinātha,[3] which made me say that Siṁha-Bhūpāla could not be Siṅghaṇa, who flourished early in the thirteenth century.[4] Recently, however, I had an opportunity to examine a defective manuscript of Siṁha-Bhūpāla's commentary from the collection of the R. A. Society of Bengal, marked 781/3. This manuscript does not contain the quotation from Kallinātha, referred to above, which would appear to be only an interpolation, probably by the editors themselves, judging from the method they say they

2 *Loc. cit.* pp. 111-112.

3 *Loc. cit.* p. 156.

4 *The Indian Antiquary*, July 1912, p. 159, foot-note

have adopted in editing a portion of this prakaraṇa. [5] This discovery thus once more left the question of the authorship of the commentary *in statu quo*. Fortunately, however, light has been thrown on the matter from other sources.

In the printed book beyond the bare name the colophons give no information about the author (*vide supra*). But the colophon at the end of the manuscript, noticed by R. G. Bhandarkar, runs as follows :—

> इतिश्रीमदंध्रमंडलाधीश्वरप्रति गंडभैरव श्री अनवोतं
> ....नभुजबलभीम श्रीसिंगभूपालविरचितायां
> संगीतरत्नाकरटीकायां संगीतसुधाकरोख्यायां
> प्रबंधाध्यायश्चतुर्थ समाप्तः ।

In the Calcutta Manuscript we have the following colophons :—

(1) इति श्रीमदन्ध्रमण्डलाधीश्वरप्राति गण्डभैरव श्रीयनवान नरेन्द्रनन्दन भुजवलभीम श्रीसिंगभूपालविरचितायां संगीतरत्नाकरटीकायां सुधाकराख्यायां रागविवेकाध्यायो द्वितीयः ॥

(End of Rāgavivekādhyāya).

(2) ०भैरवश्री अमरेन्द्रनन्दन भुवबलव्यामधीसिंह

(End of Prakīrṇakādhayāya).

(3) ०दन्ध्रमदाधीश्वर प्रतिगंड भैरव श्रीयरनवोननरेन्द्र-नंदनभुजबलभीमश्रीसिंह

(End of Vādyādhyāva).

The late Prof. M. Sheshagiri Sastri in his report on the Search for Sanskrit and Tamil Manuscripts for 1896-97 notices at some length a manuscript work called Rasārṇavasudhākara, which ends in the following colophon:—

> इति श्रीमण्डलाधीश्वर श्री अनपोत नरेन्द्रनन्दनबलभुज
> बलभीम श्रीशिङ्गभूपालविराचिते रसार्णवसुधाकर
> नाम्नि नाट्यालंकारशास्त्रे भावकोल्लासो नाम तृतीयोल्लासः ॥

5 *Loc, cit.* pp. 162, 1613, 65 and 166.

Since then, the work has been printed and published in the Trivandrum Sanskrit Series. It consists of three Ullāsas or Vilāsas, and the following are the three corresponding colophons :—

(i) इति श्रीमदन्ध्रमण्डलाधीश्वरप्रतिगण्डभैरवश्रीअन्नपोतनरेन्द्र नन्दन भुजबलभीमश्रीशिङ्गभूपालविरचिते रसार्णवसुधाकर-नाम्नि नाट्यालङ्कारे रञ्जकोल्लासो नाम प्रथमो विलासः ।

(ii) °श्रीमदन्नपोतनरेन्द्र......नामनि......रसिकोल्लासो नाम द्वितीये...

(iii) °श्रीयन्नपोत......नाम्नि..... भावोल्लासो नाम तृतीयो...

A perusal of these colophons leaves no doubt in the mind of the reader that the reputed author of both works, viz. the Saṁgīta-sudhākara (commentary on the Saṁgīta-Ratnākara) and the Rasārṇava-sudhākara, is the same Śinga.[6] An account of this Śinga with his geneology is given at the commencement of the latter work, from which it appears that he lived with his six sons "in a town called Rājāchala (Rachakoṇḍa), which was the capital of his ancestors, and ruled over the country between the Vindhya mountains and the hill Śrīśaila which is situated in the Kurnool district.[7] Prof. Seshagiri Sastri[8] mentions a printed book called Biographical Sketches of the Rajas of Veṅkaṭagiri, compiled from the Palace Records, from which he identifies this King as Singama Nāyaḍu, who flourished

6. Since writing this note I have discovered that this observation had already been made by the late Prof. S. R. Bhandarkar after an examination of the manuscripts in the State collection at Bikaner. See his *Report of a second Tour* p. 54. Burnell's remark, quoted therein, that "the nominal author is said to have been a Tanjore Prince of the last (18th) century" has proved incorrect, as will be seen below.

7. Report on the Search for Sanskrit and Tamil Manuscripts for the year 1896-97, p. 9.

8. Report on the Search for Sanskrit and Tamil Manuscripts for the year 1896-97, p. 9.

about 1330 A. D. and was called Sarvajña on account of his vast learning and was a great patron of learning.

Mr. M. T. Narasimhiengar, however, says in the introduction to his edition of the Subhāshita-Nīvī that the late Rao Bahadur K. Vireṣalingam Pantulu in his treatise on the Telugu Poets had arrived at the conclusion that this Singama Nayudu was a contemporary of Praudha Devarāya of Vijayanagar (1422-1447). I have neither before me the "Biographical Sketches" referred to above nor R. B. Pantulu's treatise and cannot therefore discuss the comparative merits of their arguments. But some of the additional arguments brought forward by Mr. Narasimhiengar are far from convincing. Thus firstly he remarks that Mallinātha, the great Commentator, is said to have attended the court of " Sarvajña Singama Nāyudu; and as according to R. G. Bhandarkar the former belonged to the 15th Century the latter could not have belonged to the 14th. If the reader, however, refers to Bhandarkar's Preface to the Mālati-Mādhava, he will find that Mallinātha is represented there as having flourished after the middle of the 14th Century, so that the period assigned to Sarvajña Singama Nāyudu by R. B. Pantulu does not agree with the tradition of Mallinātha's having attended his court.

Secondly the epithet राजमहेन्द्रनगरस्थित in the commentary *Ratnapeṭikā*, even if its correctness be granted, does not conflict with the earlier date as the Reḍḍi rulers took possession of it sometime between 1340 A. D. and 1369 A. D.

PRINCIPLES OF MELODIC CLASSIFICATION IN ANCIENT INDIAN MUSIC.

By V. G. Paranjpe.

For a proper understanding of ancient Indian music it is absolutely necessary that the technical terms employed in Bharata's Nāṭyaśāstra, our oldest authority on profane music, should be correctly interpreted and the Śrutis and notes accurately ascertained. Another matter of equal or even greater importance is that the difference in aesthetical valuation between notes belonging to the relative pitch and those belonging to the absolute pitch should be realized. Not until this is done could we proceed to deal with the Melodic classification of Bharata.

We shall take the subject of absolute and relative pitch first as of paramount importance to the Indian student of ancient Indian music. The Indian ear is accustomed to the relative pitch and is not in a position to appreciate the difficulties and the complexities of the absolute pitch, to which the Europeans are accustomed. Komala Dha for the Indian is always a relation, a definite interval from an ascertained basic note or key with its definite aesthetical associations, the note and the aesthetical value being inseparably connected for him. D, E, or F, on the other hand, in the absolute pitch, is a note, with a pitch determined with reference to a standard note which may or may not be the key, and *without a clear aesthetical significance*, until its relation to a key-note is determined. In the relative pitch, the key-note is always Sa or Doh or whatever else is the designation,

although it may be a hundred different sounds,[1] and the other notes signify key relations, i.e. intervals from the Sa or Doh ; in the absolute pitch, notes mainly signify pitch and their relationship with the key will have to be expressed by its proper designation in the relative pitch in order that an ear accustomed to the latter alone can value it correctly. In European music there is little confusion between the absolute and the relative pitch, as there are separate designations for the notes in each, and both systems are side by side in use ; while the case is otherwise in India. In modern works on Indian music we have the relative pitch exclusively in use, while in old music the absolute pitch clearly was in vogue, since Ma was the standard note[2] for tuning and Sa was not a designation of the key-note ; in fact Sa was often elided in the partial scales. The Nāradiya Śikshā[3] with its standard notes consisting of the cries of the birds and animals would even point to a rigid pitch,[4] but in the Pāṇinīya Śikshā and in Bharata's Nāṭyaśāstra[5] where the same note is described as standing in a variable capacity, we find the rigid pitch having disappeared and the ordinary absolute pitch having taken its place. The Saṁgīta Ratnākara, on the other hand, and even a late work like the Rāgavibodha, appear to use both pitches, indiscrimanately on occasions, and represent the transitional period. The two systems of notations not

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1 See, Curwen, How to read music, P. 16.

2 cf. मध्यमस्वरासंसर्गः...प्रवेशो वा. in Bharata's Nāṭyaśāstra to be explained later. References in this essay to Bharata are to Nirnayasagar Edn. (1894) ch. xxviii.

3 cf. मयूरचातकच्छागक्रौंचकोकिलदर्दुराः । गजश्च सप्त षड्जादीन् क्रमादुश्चारयन्त्यमी ॥

4 cf. उदात्ते निषादगान्धारौ अनुदात्त ऋषभधैवतौ । स्वरितप्रभवा ह्येते षड्जमध्यमपञ्चमाः ॥

5 cf. श्रुतिं तामेव पञ्चमवशात् षड्जग्रामिकीं कुर्यात् । p. 304, l. 10 ; धैवतीकृतेगान्धारे (p. 305 l. 24).

having had a parallel course, one as a matter of fact having insidiously supplanted the other, and the designations Sa, Ri, Ga, etc. being common to both, the confusion is likely to be very serious[6] and in reading the old notation we must always see what a particular note stands for, for the pitch or for an interval, especially, what Sa stands for, for a note or for the key note, and then only can we do justice to the melody before us.

Coming now to the interpretation of old musical terms we shall first turn to the Grāmas, the Mūrchchhanās, the Śrutis and the Svaras. Shadja and Madhyama are the two Grāmas recognized by Bharata, the latter being differentiated from the former by its diminished fifth. The Grāma was a set of seven notes of which the intervals were not varied, except by the Kākali and Antara notes, which were only grace notes sparingly used and only in the Āroha, the Kākali serving to vary the fourth in a single Jāti and the Antara varying the sixth and seventh in the Pañchama and Madhyama respectively.[7] The Vikṛita notes apparently belong to a later period, when the liberties contemplated in Bharata V-35[8] were freely taken and new Mūrchchhanās[9] and new Svaras came to be employed, and when the Grāmas themselves, their number not

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6 Mr. Deval's paper on the Bhinna Shadja read before the Bhandarkar Institute for instance, was vitiated by his having understood म the न्यास in its modern value of 498 cents, while the value should have been 0.

7 cf. Bharata, the portion on p. 307 from स्वरसाधारणं द्विविधं द्वैग्रामिक्यं to end of v. 39. See also the table of Jātis towards the end of the essay.

8 साधारणकृताश्चैव काकलीसमलंकृताः । अन्तरस्वरसंयुक्ता मूर्च्छना ग्रामयोर्द्वयोः ।

9 cf मतङ्ग quoted in सं.र. pp. 60—61; also मेघदूत II. 26; माघकाव्य I, 10; कुमारसं. VIII 51 (?).

having correspondingly increased, could not serve their purpose well and so fell into disuse.

The Grāma notes in their dynamic aspect, as a succession of notes each with an aesthetic association by reason of its relationship with the key would form a Mūrchchhanā, a musical scale. Scales of seven notes were called Mūrchchhanās proper, while hexatonic and pentatonic scales were called Tānas.

In the scales we have to do not merely with notes, but with musical intervals, which, as we shall see later on, are as numerous and varied as in modern music. The Shaḍja Grāma scale for instance, with Ri, as the key,

	Ri	Ga	Ma	Pa	Dha	Ni	Sa	Ri
(value in cents)	182,	294,	498,	702,	884,	996,	1200	182,

when transported gives the scale

Sa	Ri	Ga	Ma	Pa	Dha	Ni	Sa
0	$\underline{112}$	$\underline{316}$	$\underline{520}$	702	$\underline{814}$	$\underline{1088}$	1200

where we have five vikṛita intervals, while the ancients would still regard the notes as Śuddha.

A brief mention, at this stage, of the method of ascertaining the mathematical values of the Grāma notes and the twenty-two Śrutis, will not be out of place. The all important passage in Bharata on p. 304 and verse 24 on page 303 are our main authorities here. The value of Ma and Pa are fixed by physical laws to be of 498 and 702 cents respectively. Now if the four Śrutis in the subtractions of page 304 be Y, Y′, Y″, and Y‴ respectively

$$Y+Y'+Y''\times Y''' = \text{Pa}-\text{Ma} = 702-498 = 204$$
$$= \text{Ma}-\text{Ga} = \text{Sa}-\text{Ni}$$
$$\therefore \text{Ga} = 498-204 = 294, \text{ and Ni} = 1200-204 = 996 \quad \text{(i)}$$

$Y+Y' = $ Ga-Ri $=$ Ni–Dha (ii)

$Y+Y'+Y''$ $=$ Ri (–Sa) $=$ Dha–Pa (iii)

If Ri $= X$, from v. 24 P'a $=$ Pa–Y $=$ Ri $+ 498$

$$\therefore 702 - Y = X + 498$$

$$\therefore X + Y = 204 \quad \text{(iv)}$$

The Svaras and Śrutis might now be written in columns to denote each revised tuning.

	$-(Y)$	$-(Y+Y')$	$-(Y+Y'+Y'')$	$-(Y+Y'+Y''+Y''')$
Sa o	(1st Subt)	(2nd Subt)	(3rd)	(4th)
Ri. (3rd Śr) $Y+Y'+Y''=X$	(2nd Śr) $Y'+Y''$	(1st Śr)		O=Sa
Ga (5th Śr) $2Y+2Y'+Y''$ $=294$	(4th Śr) $Y+2Y'+Y''$			(Ri)
Ma 498(9th Śr)	8th	7th	6th	(294=Ga)
Pa 702	(12th)	11th	10th	(498=Ma)

Now

$$X = Y + Y' + Y''$$

While $X+Y=204=Y+Y'+Y''+Y'''$ (cf. i)

$$\therefore Y' = Y'' \quad \text{(v)}$$

Also Ga $=294 = 2Y+2Y'+Y'' = X+Y+Y' = 204+Y'$

$$\therefore Y' = 90 \quad \text{(vi)}$$

And $2Y+Y'' = 294 - 2Y' = 114$ (vii)

If no Śruti can be less than of 20 cents then Y is greater than 20 and less than $\left(\frac{114-20}{2} = \frac{94}{2}\right) = 47$ (viii).

And if Ri $+ Y = 204$, Ri must be greater than (204–47) $=157$ and less than (204–20) $=184$......(ix).

Now by the laws of sound the only interval between 157 and 184 cents that could be utilised in music is of 182 cents $= \left(\frac{10}{9}\right)$ because the fraction contains the smallest integers available and then again by

fitting in the figures in the columns of Subtractions above with Ri equal to 182 and to any intermediate figure say 160, we shall see that in the latter case we have to sacrifice at least six of the known musical intervals up to the fifth.

0	22	90	70	22	0	44	90	26	44
182	160	70	0		160	116	26	0	
294	272	182			294	250	160		
498	476	386	316	294	498	454	364	338	294
702	680	590	520	498	702	558	568	542	498

This appears to be a convincing proof for the equation Ri = 182. The other Śrutis and Svaras will be as follows :—

884 (16)	862 (15)	772 (14)	
996 (18)	974 (17)		
1200 (22)	1178 (21)	1088 (20)	1066 (19)

Now we may turn to the interpretation of the difficult word Mūrchchhanā, which has been so far totally assumed to mean a scale. Three sentences in Bharata, page 306 may be pointed out in this connection for being carefully studied.[9a] The Mūrchchhanā is indicated by reference to the Madhyama note on the Vīṇā. On account of its imperishibility the Madhyama is never elided nor its pitch lowered (as is done in the case of other notes for partial scales).

9a मध्यमस्वरेण तु वैणेन मूर्छना निर्देशो भवति । अनाशित्वान्मध्यमस्वरस्य न निग्रह: प्रवेशो वा......मूर्छनाप्रयोजनमपि स्थानप्राप्त्यर्थम् । I have made a necessary addition in the second sentence, that of न, which is supported by the reading of the Bikaner Ms. of which there are two copies in B.O.R.I. Library. Cf. also the following verses.

The purpose of the Mūrchchhanās also is to facilitate the judging of a suitable pitch. By Madhyama in this passage is clearly meant the fourth note, for here in speaking of the partial scales, Bharata is alluding to the imperishibility of the Madhyama, which is again spoken of in verses 72–73[10]. The Mūrchchhanā itself is defined in Bh. V-34[11] as the seven notes pronounced in their proper order, while according to the definition of the Sang. Ratn.[12] it is the ascent and descent of the seven notes in order. Neither the descent nor the ascent are essential; but it was by singing the notes thus that a singer's ear would be attuned to the key, the key being of course the note beginning the ascent and ending the descent. What Bharata therefore means to say is that the Mūrchchhanā was mentioned and recognized by the position of the key with reference to the Madhyama. There was a strange superstition about the Madhyama shared by the Indians along with the Greeks[13], for it was never elided and the vina was tuned by it. It could not have been an absolutely fixed note, but it must have been of a tolerably uniform pitch like the A of European music and the singer could gauge his voice by the relation of the key to the standard note, Ma, since the voice could not be raised higher than Sa in the Tāra register according to ancient theory.[14] Then again if, as stated in Bharata, Ch. XVII, dejection and other mental states are to be expressed by low or

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10 सर्वस्वराणां नाशस्तु विहितस्त्वपजातिषु । न मध्यमस्य नाशस्तुं कर्तव्यो हि कदाचन सप्तस्वराणां प्रवरो ह्यनाशी चैव मध्यम :। गान्धर्वकल्पे विहित: सामगैरपि मध्यम: ॥

11 क्रमयुक्ता: स्वरा : सप्त मूर्छनास्त्वभिसंज्ञित : ।

12 क्रमात्स्वराणां सप्तानामारोहावरोहणम्

13 cf. Aristotle, Problems, quoted by Helmholtz, sensation of Tone (Tr. Ulis p. note).

14 Bharata V. 79 ; but the text is corrupt; cf. सं. र. pp. 81-82

high pitch of the voice, the singer could obtain the desired effect by tuning the Ma accordingly. This then would be the meaning of the last part of the passage.

Now Matanga, from the quotation in Kallinatha's commentary[15], understands Bharata rather differently. According to him the Mūrchchanā is mentioned in the middle register, otherwise the lower or upper register might not be possible. Śārngadeva[16] echoes the explanation of Matanga and Kallinath[17] reiterates the authority of Bharata, while Bharata himself has manifestly meant only the note Ma and not the middle register.

This confusion about the Madhyama Svara of the text has a significance of its own. It signifies that just as with the introduction of the Vikṛita Svaras, the Grāmas ceased to be of use, so also did the Mūrchchhanās, and they survived in music as effete forms, with a sacrificial sanctity.[18] The Sthānaprāpyartham of the text haunted the minds of the later interpreters of a dead art and they understood the Mūrchchana to denote the pitch rather than the scale. Kallinatha's quotations[18] from older authors would bear out the truth of the preceding remarks. "In regard to the knowledge of the proper Mūrchchhanās for the different Grāmarāgas and of the proper uses for them we have to refer to this quotation from Matanga: Now how do you know the proper Murchchana for these Ragas? Our answer is

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15 मतङ्गोऽपि..... मध्यसप्तकेन मूर्छनातिदेशः कार्यो मन्द्रतारसिध्यर्थम् । सं. र. p. 47

16 सं. र. p. 47 मध्यमस्थानस्थषड्जेन मूर्छनारभ्यतेऽग्रिमा ।

17 मध्यस्थानस्थषड्जेन......आरभ्यते । कुतोऽयं नियम : । भरतादिनियमितत्वात्तासां यथाह भरत: । मध्यमस्वरेण वैणवे(?)न मूर्छनानिर्देश इति । मतङ्गोऽपि &c.

18 सं. र. p. 164 ग्रामरागादीनां मूर्छनाविशेषपरिज्ञाने विनियोगविशेषपरिज्ञाने च मतङ्गोक्तमनुसंधेयम् । तद्यथा...। ननुपूर्वोक्तानां रागाणां मूर्छनाविशेषनिर्देशः कस्माज्ज्ञायते इति चेदुच्यते । आप्तवचनान्मूर्छना विज्ञायते । तथा चाह कश्यप : । ज्ञात्वा जात्यंशबाहुल्यं निर्देश्या मूर्छना बुधैरिति

the Mūrchchhanā is known from older authorities. Now for instance Kasyapa says : Wise men should observe which of the Anśas recurs oftenest and so determine the Mūrchchanā." It is in accordance with this dictum of Kaśyapa that Śārngadeva himself has apparently understood the Shādjī Jāti to have the Mūrchchhanā beginning with Dha,[19] since Ga is there the Bahula Anśa and Sa being now tuned to Dha pitch, Tāra, Ga would in reality be Tāra Sa, which is the theoretical limit of the voice. It was probably on account of the same difficulty that Matanga and Nandikeśvara, according to Kallinath[20], had desired twelve Mūrchchhanās to suit the requirements of the doctrine of Mandra and Tāra registers according to the music current in their times.

According to Kallinath's interpretation of Sangīta-Ratnākara, I-4,-14-16,[21] there were current in Śārngadeva's time Mūrchchhanās that amounted to scales, only were indicated in relative pitch, Sa being the key note. But we find no further mention of them and it is doubtful whether, as Kallinath says, Śārngadeva in these verses was recording the current practice or whether he wanted to suggest a different interpretation of the Mūrchchhanās from that of his predecessors 'Pare Vidus' could very well be employed for suggesting a new interpretation. Kallinatha's very boast that he had solved a riddle only shows that the old system had in his days become thoroughly unintelligible.

19 सं. र. I. 7. 62. cf. also 67, 70, 72 &c.

20 सं. र. p. 47.

21 लक्ष्यानुरोधेन पक्षान्तरमाह । षड्जस्थानस्थितैर्न्याद्यै रजन्याद्याः परेविदुः । सरिगमपधनीत्युत्तरमन्द्रस्थानेष्वेव निसरिगमपधेतिरजनीस्वरानुच्चारयेदित्यर्थः । षड्जादिमध्यमादींश्च तदूर्ध्वं सारयेत्क्रमात् । ....स्वस्वश्रुतिसंस्थापर्यालोचनया श्रुत्यन्तराणि प्रापयेदित्यर्थः । Mallinatha's quotation from the सं. र. in his comm. on Megh. 66 is to the same effect: स्वसाणां स्थापनाः सान्ताः (with स as the final note) मूर्छनाः सप्त सप्त हि.

That the Mūrchchhanā was a scale in Bharata's time would be clear when we correctly read a very important passage at the bottom of page 305. The reading of the Nirnayasagara edition is obviously defective. Corrected by comparison with the readings of the Bikaner Ms. of which there are two copies in the B. O. R. I. Library the passage would read thus.

द्विविधैकमूर्छनासिद्धि : । तत्र षड्जग्रामे द्विश्रुत्युत्कर्षाद्धैवतीकृते गान्धारे मूर्छना ग्रामयोरव्यक्ता । अन्तरवशाच्च (cf. पञ्चमवशात् p. 304) मध्यमादयो यथासंख्येन निषादादित्वं प्रतिपद्यन्ते । तद्वद् मध्यमग्रामे धैवतमार्दवाद्वैविध्यं तुल्यश्रुत्यनारत्वाच्च संज्ञान्यत्वम् । मध्यमग्रामे हि चतुःश्रुतिकमन्तरं पञ्चमधैवतयोः । तद्गान्धारोत्कर्षाच्चतुःश्रुतिकमेव भवति । शेषाश्चापि मध्यमपञ्चमधैवतनिषादषडजर्षभा मध्यमादित्वं प्राप्नुवन्ति । तुल्यश्रुत्यन्तरत्वात् ।

This would be best explained by a concrete instance. Let us take for example the Mūrchchhanā commencing with Sa of the Shadja Grāma.

$$0 \quad 182 \quad \frac{294}{386} \quad 498 \quad 702 \quad 884 \quad 996 \quad 1200$$

That of the Madhyama Grāma with Ma,

498 680 884 996 1200 182 294 498

when transposed gives the scale

$$0 \quad 182 \quad \frac{386}{294} \quad 498 \quad 702 \quad 884 \quad 996 \quad 1200$$

The two scales, now, will be identical if the Ga in former be sharpened or if the Dha in the latter be flattened by the Śrutis, and thus we could treat a Shadjagrāmic Mūrchchhanā as Madhyamagrāmic and vice versa, the intervals being identical.

It is to be noted here that the question of pitch does not arise at all and the very fact that the latter scale, though a fourth above the former, should be regarded as identical with it would point to Mūrchchhanā having nothing to do with pitch. Secondly in V. 35 the

Mūrchchhanās are described as being susceptible of variation by the Kākali and Antara and the Elisions. The ideal wife of the Yaksha in Kalidas's Meghadūta[22] is described as a tone poetess also, having composed a Mūrchchhanā of her own which she however forgets. Māgha[23] similarly describes Nārada's Vīnā, Bṛihatī, as producing Mūrchchhanās of new grāmas. Mūrchchhanā therefore could not be anything but a scale.

Having thus far discussed the techincal terms we may now turn to the main subject. The fourteen full scales of Bharata in relative pitch will be as follows :—

First svara of Mūrchchhanā		Shadja Grāma scales							
		Sa	Ri	Ga	Ma	Pa	Dha	Ni	Sa
1	Sa	0	182	294	498	702	884	996	1200
2	Ni	0	204	386	498	702	906	1088	1200
3	Dha	0	112	316	498	610	814	1018	1200
4	Pa	0	182	294	498	680	792	996	1200
5	Ma	0	204	386	498	702	884	996	1200
6	Ga	0	204	408	590	702	906	1088	1200
7	Ri	0	112	316	520	702	814	1018	1200
					Madhyama Grāma Scales.				
8	Ma	0	182	386	498	702	884	996	1200
9	Ga	0	204	386	590	702	906	1088	1200
10	Ri	0	112	316	498	702	814	1018	1200
11	Sa	0	182	294	498	680	884	996	1200
12	Ni	0	204	386	498	702	884	1088	1200
13	Dha	0	112	316	498	610	814	996	1200
14	Pa	0	204	316	.520	702	814	1018	1200

of these Nos. 5, 10, 11, 13 and probably 12 have not been used at all in the Jātis. The reason appears

22 Megh. II. 26.

23 Māghakavya I. 10.

to be that a difference of 22 cents in a note which is either slurred or has not an important relation with the key does not really matter and so Nos. 10, 11, 12 and 13 become superfluous when there are No. 7, 1, 2 and 3, while Nos. 8 and 9 have an individuality of their own on account of their second and third respectively. It is a noteworthy feature of ancient melody that although a Pa of 680 cents is the distinguishing feature of a grāma still that interval has been carefully avoided in music. No. 5 and 11 have therefore been excluded. We see from the scales used in the Jātis again that there were nineteen musical intervals actually employed in the old music in spite of its eight fixed notes. These are :—

0 or 1200, 112, 182, 203, 294, 316, 386, 408, 498, 520, 590, 610, 702, 814, 884, 906, 996, 1018, 1088.

Two intervals more 680 and 792 could have been employed, but at least the former was felt to be harsh and unfit for melody.

As regards the number of Tānas and Mūrchchhanās on page 306 it appears that the calculation is merely theoretical. There was the table of Jātis before the theorist with a certain number of partial scales in use. The number of Tānas has been calculated accordingly, but the possible variety of scales has not been exhausted, Ma having never been elided and other possible elisions having been left unaccounted for.

Besides the partial scales, there were, according to v 35 and the following prose paragraph, other kinds of scales that were in vogue, but which could not be classified. This part of the Sādhāraṇakṛita scales and the Jāti Sādhāraṇa is obscure and the Mss. differ very

considerably about the latter portion. One thing is clear however from these portions and that is, that a scale varied by the Kākali or Antara is different from the Sādhāraṇakṛita scale. In the paragraph following V. 35, which has been explained above, we have an instance of the latter kind, and there, it is not the Kākali, which might be expected to vary the Shadja Grāma scale, that is used, but a sharpened Gandhāra; and so also in the Madhyama grāma we see the Dhaivata flattened. These scales, as remarked above, introduced new notes and made the Grāmas and the Mūrchchhanās based on them practically useless and so paved the way for the modern music with the relative pitch.

From the scales we ought to go to the songs and the musical modes. Unfortunately with the exception of the songs preserved in the Sangīta Ratnākara as instances of the Jātis which appear to be very old on account of the sanctity attributed to them, we have no idea of the actual music of ancient India. The Jāti in Bharata is neither a song nor a scale nor a musical mode, but is the genus under which different musical modes would be grouped together. It is different from Mūrchchhanā in as much as the Mūrchchhanā denoted a set of notes which fixed the key relationship in the mind of the singer and therefore was a mere skeleton which would have to be enlivened and, must have an individuality before it could be a Jāti. It is different from a musical mode, the modern Rāga, because several Rāgas, by reason of a common scale of a common mode and of a structure similar in regard to the characteristic phrase, the tone proportion, ornament and movement of tones, although distinct in point of Grāma, Aṃsa, and Apanyāsa, can be,

grouped together, and were so grouped together under the Jātis.

The enlivening and the individualisation of songs in general, and therefore of the Jātis, which represented the underlying principle of melodic classification, have been analysed by the ancients and the Jāti is represented as having ten vital limbs, which are enumerated in the following verse;

ग्रहांशौ तारमन्द्रौ च न्यासोपन्यास एव च ।
अल्पत्वं च बहुत्वं च षाडवौडुविते तथा ॥

Of these Tāra and Mandra, Alpa and Bahu Shādava and Anduva are related terms and so there are really seven charactcistics of a Jāti. Graha is the note with which a song opens and Nyāsa is the note with which it closes. Tāra and Mandra signify high and low pitch. As a characteristic of the Jāti they would mean the predominant pitch in the melody; Shādava and Anduva the elision of notes, Alpatva and Bahutva, the tonal proportions. Apanyāsa is the end note in sections of the melody; while Aṃsa is the most important note in a melody,—the beauty-point which gives the melody its individuality and to which all the other notes are subordinated.

Although the characteristics of the Jāti have been mentioned in Bharata as though they were of equal importance, we have to realize the importance of the Nyāsa; for while the others are variable in a Jāti, the Nyāsa in all Jātis except two is invariable and all the Śuddha Jātis are named after it. Nowhere in Bharata have we an indication of the tonics or the key notes of the Jatis although the absolute pitch was in use. As indicated above, in absolute pitch the key

note must be mentioned ; otherwise the key relationship not being ascertained, the aesthetical effect would be impossible. The Nyāsa, described as गीतसमाप्तिकृत् by Śarngadeva and निरपेक्षावसानकारि by Kāllinath, which determines the nature of the Jāti in a way by its invariability, which determined the range of the notes in high and low registers (भरत v. 80), which can never be elided in the partial scales (Sangīta Ratnākara page 74) and which is explained by the word ध्रुव in the सं. र., must be the key note. No doubt the Nyāsa is described only as the final note, but in most songs there is a gravitation of the notes towards the key at the end of the song and it is only on plagal modes like Khamāja, where one could even question the propriety of Sa as the key, that the key note is invariably different from the end note. In spite of the wonderful powers of observation and analysis of the ancients it appears that on account of the absence of relative pitch and the consequent simplification of musical thought, the ancients failed to distinguish between the final note and the keynote, and in consequence there are two Jātis which are described as having more than one Nyāsa ; in these cases also from the typical songs of the सं. र. and the elisions mentioned in connection with the partial scales we could easily determine which are the keynotes and which the end notes.

With the Nyāsa as the key we could form same idea of the Jātis although it is impossible to restore a lost music only by a general description. Below I give a table of the Jātis with the note values in relative pitch arranged first according to their names and then according to their intervals, which would show that the Jātis would form distinct melodic modes to-day.

TABLE OF JATIS.

Shādjī.	0	182	294	498	702	884	1200	Ni 996
Ār.	0	112	316	702	814?	1018?	1200	Ma520Dha? Ni ?
Gān.	0	204	386	702	906	1200	Ma590	Ni1088
Ma.	0	182	386	702	884	1200	Ma498	Ni1088 (Antara)
Pa.	0	204	520	702	1018	1200	Ga316	Dha906 (Antara)
Dhai.	0	112	498	610	814	1200	Ga316	Ni 1018
Nai.	0	386	498	702	1088	1200	Ri204	Dha 906
Shadjakai.	0	204	408	590	702	906	1088	1200
Shadjodī.	0	386	498	702	996	1200	Ri2C4	Dha 884
Shadjama.	0	204	386	702	884	1200	Ma590 Ni 996	(Kakali)
Gan. Udī.	0	182	386	498	702	996	1200	Dha 884
RaktaGā.	0	204	386	702	906	1200	Ma590	Ni 1088
Kai.	0	204	386 498	702	906 884	1200	Ma590 Ga386	Ni 1088
Ma. Udī.	0	182	386	498	702	884	996	1200
Kārmā.	0	204	316	520	702	814	1018	1200
Gā. Pa.	0	204	386	590	702	906	1088	1200
Andhrī. Nanda.	0	204	386	590	702	1088	1200	

These should be arranged according to the notes as follows to show that they would form different Ragas to-day.

Ār.	0	112	316	(520)	702	
Dhai.	0	112	(316)	498	610	
Shā.	0	182	294	498		
Ma.	0	182	386	702		
Gān: Udī.	0	182	386	498	702	884
Ma. Udī.	”	”	”	”	”	996
Sha. Udī.	”	(204)	386	”		
Kār.	0	204	316	520		
Gān. Pa.	0	204	386	590	702	906
Ānd.	”	”	”	”	”	1088
Nan.	”	”	”	”	”	”

Gān, Kai. RaktaGā.	,,	,,	,,	702	906
Shad. Ma.	,,	,,	,,	,,	884
Sh. Kai.	,,	,,	408	590	
Kai. (2)	0	204	498	702	
Pa.	0	204	520	702	1018
Sha. Udī.	0	386	598	702	996
Nai.	,,	,,	,,	,,	1088

The eighteen Jātis would be the source of several Rāgas to-day as the differences of Aṃśa and Apanyāsa always vary. In the melodic effect in the case of Āndhri and Nan. and of Gān., Rakta. Gān. and Kai. the ancients found the change of Aṃśa, Apanyāsa and Sanchāri notes so radically varying the melody that it was found necessary to have two different Jātis where one would have sufficed.

Bharata's book was not a text book on Music. In a treatise on dramaturgy he has just devoted a few pages to music and he has given brief notices of the salient features of the art. But from these even we can very well see how the infinite forms of music must have been analysed and classified by the ancients; how music also exercised the intellect of scholars like the sister arts and philosophy, and how with all the limitations of old music there was a nearly perfect system evolved by them in which we see side by side with the minutest attention to technique and form, a most scientific classification; and this was to be expected from progress which the ancients had made in the arts and sciences & logic and metaphysics. The clear cut generalisations of the Nāṭyaśastra appear to be the crystalised product of centuries of observation and systematization. Now, while, there is a spirit of re-generation abroad and India is searching her past with a view to improve her

future, one wonders whether instead of the Thāṭas with their woefully unscientific classification and the multiplicity of chromatic notes, we could not return more profitably to the old system of Grāmas, Mūrchchhanās and Jātis. The old Grāmas were discarded because they could no longer serve their purpose, owing to the progress which music had made, but if we rightly understand the old principle of classification, we could arrive at a number of Grāmas—six would most probably do—that would exhaust all the scales in use. But this is a problem of the present with which we here are not concerned.

ON THE USE OF THE ASTRONOMICAL PHENOMENA IN FIXING THE CHRONOLOGICAL PERIODS IN INDIAN HISTORY.

BY

V. B. KETKAR.

We all agree that facts, however important with regard to the progress of a nation, lose half their importance when mentioned without the time of their occurrence. Our Vedas, Vedāṅgas, Smṛitis and other ancient works come under this category. They are full of interesting details about consecutive facts, but they never mention the year of their occurrence in relation to any era. The Rigveda which is supposed to be the most ancient of all the records in the world, mentions the phenomenon of a total solar eclipse, and says that the Rishi Atri alone could dispel the darkness, but as solar eclipses occur almost every year their mention without the year of their happening is of little use.

2. It may be mentioned however on behalf of the ancient Āryans that they lived in an age when there was no era. They lived in isolated colonies widely separated from each other. Each colony was a little world carrying on the functions of a civilised life according to the ideas then prevalent. So it is unjust to blame them.

3. Fortunately for the History of the human race, grand celestial eras started by God are running their rounds through all the past ages; and human knowledge of astronomy has, at present, so far advanced and

has reached such a degree of perfection that on the strength of mathematics and the principles of the celestial mechanics modern astronomers like Leverrier and Newcomb, have succeeded in determining their vast period, correct to the nearest century. The period of the human civilisation compared with them is so small that it can form but a small fraction for them. By celestial eras I mean the periods of the revolutions of the equinoxial and planetary nodes, for instance the equinoxial points complete one revolution in 26,000 years, and the nodes of Jupiter's orbit in 90,000 years.

4. Our Vedic Ṛishis were the keenest observers of the celestial vault. In fact their deities were no other than the luminaries of the sky and the natural elements such as water, fire and lightning. Their records abound in references to the celestial phenomena such as the conjunctions of the planets with the stars and the positions of the stars in relation to the horizon. They have left us legends regarding the stars Polaris, Sirius, Procyon, Canopus, Orion and Vega, and the star-clusters of Pleiades and Hyades. To ordinary men these may seem to be quite trifling but to scholarly minds they are as valuable as the beds of diamonds.

The following lines will fully illustrate what is said above. I have discussed in them on astronomical principles the bearing of each phenomenon to chronology, and have explained its mathematical treatment necessary to the determination of its date.

The first two of the following phenomena have been discussed by the late Mr. S. B. Dixit in his Bhāratiya Jyotish Shāstra. I have re-discussed them here somewhat differently in order that the readers

may have in one place all the important phenomena connected with the determination of the pre-historic dates.

The date of the Solstices mentioned in the Vedānga Jyotisha

(The Equinox in Bharaṇī).

5. As a first instance I shall discuss the following verse given in the Vedānga Jyotisha and shall determine the date of the observation from the astronmical evidence contained in it:—

प्रपद्येते श्रविष्ठादौ सूर्याचांद्रमसावुदक् ।
सार्पार्धे दक्षिणार्कस्तु माघश्रावणयोः सदा ॥

In what follows it must be borne in mind that the Longitudes are sidereal and are measured from the fixed starting point which is 180° distant to the star Spica (Chitra) or 47′ east of μ Picium. Also the present time should be understood to mean the year A. D. 1900. The distance from the starting point to the Vernal Equinox was 22° 27′ in A. D. 1900.

The verse mentions logitudes of the Solsticial points as they were observed in the days of Vedāṅga Jyotisha and thereby enables us to fix the date of the observation.

The smmmer Solstice was according to the above verse at the middle point of the asterism Āśleshā. Its longitude was therefore equal to eight and a half Nakshatra space i.e. 113° 20′. At present the longitude of the same point is 67° 20′. It has therefore retrograded (113° 20′ minus 67° 20′)=46°, since the recorded observation. As it regresses at the rate of one degree in 72 years, it must have taken 46×72=

3312 years or 33 centuries to do the retrograde journey prior to A.D. 1900. It is plain therefore that the date of the observation recorded in the above verse must he B.C. 1400. This is one of the impregnable fortresses of Indian antiquity and all the attempts of the western Scholars like Prof. Max Müller to reduce it have proved ineffectual.

The date of the first appearance of the star Canopus on the horizon of latitude 22° N.

(The Equinox in Āshleshā)

6. We find in the Bṛihatsamhitā of Varāhamihira (A. D. 500) the following verse on the movement of the star Canopus (Agastya):—

भानोर्वर्त्मविघातवृद्धशिखरो विंध्याचल:स्तंभितो
वातापिर्मुनिकुक्षिभित् सुररिपुर्जीर्णश्च येनासुरः ।
पीतश्चांबुनिधिस्तपोंबुनिधिना याम्या च दिग् भूषिता
तस्यागस्त्यमुनेः पयोद्युतिकृतश्चारः समासादयम् ॥

Meaning:—The milk-white (or water-purifier) sage Agastya who ever adorns the Southern skies, drank off the ocean, digested the Demon Vātāpi who hated the gods, and killed the Rishis by entering and bursting open their bellies. He stopped the growth of the mountain Vindhyāchala whose summits had grown so high as to obstruct the passage of the sun.

Shorn of all poetic exaggeration and legendary form this verse tells us that the star Canopus which always revolves in and adorns the Southern skies, appeared for the first time to the Ṛishis who dwelt on the nothern side to emerge on the ridge of the mountain Vindhyādri and gradually surpassed it in altitude at its culmi-

nation, since which time the ocean disappeared. (I am unable to trace the metaphorical sense of the story of the demon Vātāpi).

The sudden appearance of a bright star like Canopus upon the Southern edge of the horizon must have been as striking a phenomenon as that of a Nova is to modern astronomers. It must have been therefore considered a great epoch to which the subsequent great events might be referred. The near approach of two planets is looked upon in astrology as a contest between them. In the same way the sudden appearance of Canopus on the summits of the Vindhya was looked upon in a poetical sense, as a sort of race for deciding which of them could rise higher. Fortunately for Canopus his upward speed was at its maximum when it appeared at 22° of latitude (see Table in Sec. 9 infra) and so he came out victorious as the poet imagines

I shall now proceed to explain how the date of the phenomenon can be calculated. But before doing this I must explain the connection between the precession of the equinoxes and the meridional altitude of Canopus, which varies from zero to 38° latitude from the south point on the horizon of a given latitude.

Owing to the precession of the equinoxes the poles of the celestial equator move slowly round the poles of the ecliptic in a small circle of 24° in radius in the course of 26000 years. The star Canopus lies fixed at a distance of 14° from the south pole of the ecliptic. Viewed from Canopus the motion of the southern pole of the equator takes place in an excentric

circle around it. The effect of this is that the distance of Canopus from the south pole varies from 10°=(24°—14°) to 38°=(24°+14°) in the course of 13000 years and back again in the same period. India lies between the North latitudes of 8° and 35° and is therefore well situated within the range of the north and south oscillations of Canopus.

7. I have prepared the following table employing the present position and motion of the equinoxes. It gives the Christian dates of the first appearance and last disappearance of Canopus on the horizons of different North latitudes in the course of its current oscillation.

First appearance on horizon.	On Latitude North	Last Disappearnce on horizon.	On Latitude North
B. C. 11180 ...	10°	A. D. 3870 ...	34°
9030 ...	17°	6020 ...	30°
6880 ...	24°	8170 ...	24°
4730 ...	29°	10320 ...	16°
2580 ...	33°	12470 ...	10°
430 ...	36°	14620 ...	10°
A. D. 1720 ...	37°	A. D. 16770 ...	17°

The mountain Vindhya extends East and West along the 22° parallel of latitude. It is easy to deduce from the table by proportional parts that Canopus made its first appearance on the summits of Vindhya about the year B. C. 7500. It is also seen from the table that on the latitude 24° it was first seen in B. C. 6880 and shall be lost sight of there in A, D. 8170 during its return journey towards the South Pole.

The legend about the drinking off of the sea by Canopus.

8. The purāṇas tell us that the 60000 sons of

the king Sagara in their search for the lost sacrifical horse, entered the Pātāla-Loka (the subterraneous regions) and offended the great Muni Kapila* who was deeply engaged there in his Tapascharyā; that they were all burnt to ashes by the fire of the curse of the angry Ṛishi; and that the river Ganges moved by the entreaty of Bhagīratha the grand-son of Sagara, consented to come down from the Himālaya to appease the anger of Kapila and to raise his ancestors from their ashes. The esoteric explanation of this legend seems to be that after the appearance of Canopus above the Vindhya mountain a terrible volcanic erruption extending over a vast area took place, laying bare a part of the present low valley of the Ganges which was at that time covered by sea, as far as Haridwar. The angry Kapila in the Pātāla Loka is represented by the subterraneous volcanoes that once raged among the Himālayas, and it is quite plain that the river Ganges should advance as the sea receded back, owing to the gradual upheaval of its bed. The word Sāgara which means a Sea seems to be derived from King Sagara who together with his 60000 sons, stands here for the big sea and its countless gulfs, channels and esturies that once separated the Himālayas from Central India. The drinking off of the sea by Agastya is therefore another version of the same terrible cataclysm which must have taken place over a vast area a few centuries after the first appearence of Canopus above the Vindhya Mountain, i.e. after B.C. 7500. Geologists might object to this speculation on account of the smallness of the period

* The spot of the hermitage of Kapila Muni is still pointed out not far from Haridwar.

which had elapsed. But they should see* that it carries us 10 thousand years back from the present time.

The date of the battle of Kurukshetra.

9. This problem has been the gordian knot to all the scholars who have hitherto tried to solve it. In our Maharastra learned men like V. R. Lele, C. V. Vaidhya and my humble self have in vain worried our heads in attempting to solve it. The reason why we failed was our blind faith that the allusions in the Mahābhārata with regard to the planetary places were genuine. But the positions of the planets stated therein in relation to the bright stars such as Maghā, Chitrā and Rohinī are often double and sometimes even triple. Even after making due allowance for the

*The Arabian sea at that time covered the Indus Valley upto Multan and the seven rivers formerly fell into the sea directly as mentioned in the Rig Veda. Benares is popularly believed to have formed the new tenth continent and to have been supported or held up by the trident of God Shiva. This seems to allude to the age when the Bay of Bengal had receded from Haridwar as far back as Benares which at that time might have formed an Island at the mouth of the Ganges.

Even within living memory large areas are raised up by the gradual upheaval of the sea-bed and the present Island of Bombay which formerly consisted of seven separate Islands, is an instance. The rising and sinking of surfaces surely do take place in periods much shorter than those taken up in the formation of Geological Strata. Central India and the Deccan then formed a triangular island called Jambudvīpa with the Pārasnāth, the Aravali and the Nilgiri peaks at its three corners. In the Purāṇas the Godavery is called वृद्धगंगा i.e. the old Ganges, probably in comparison with the later time of appearance of its younger sister the Himalayan Ganges.

The other Himalayan rivers Gogra, Gomati and Gandaki being at that remote time mere mountain torrents, the Rigveda omits their mention and begins with the Ganges the enumeration of the seven rivers viz. इमं मे गंगे यमुने सरस्वति &c.

interval that separated them, they (the positions) are utterly irreconcilable and contradictory. Even the first day of the battle being mentioned with reference to two Nakshatras as Maghā and Mṛigashirsha, cannot be fixed. This ought to have been a sufficient warning to me at least to give up the attempt as hopeless. I now think that the inconsistency between the double and triple positions of the same planet can only be explained by the probability that the statements must have been later interpolations in the epic, by persons quite ignorant of astronomy, and that their object must have been simply to produce awe and terror in the minds of the persons addressed about the coming catastrophy.

10. My friend the late Mr. Trimbak Gurunath Kale has directly attacked the problem in his book called 'Purāṇa Nirikshaṇa' and has at last solved the question most satisfactorily. The evidence collected by him from independent sources proves that the battle of Kurukshetra took place in the year B. C. 1263. I shall not here repeat all the details of the evidence which can best be gathered from his own book. I shall content myself with quoting here one or two of his cogent evidences corroborating his conclusions.

The Bhavishyapurāṇa gives the date of the battle as follows :—

भविष्याख्ये महाकल्पे प्राप्ते वैवस्वतेऽन्तरे
अष्टाविंशे द्वापरांते कुरुक्षेत्रे रणोऽभवत् ॥

The meaning of this verse is that out of the total period of the Bhavishya Mahākalpa containing 14 Manus, only six Manus, 27 Yugas and three years had elapsed when the battle of Kurukhestra took place. A

Manu being equal to a period of two hundred and eighty eight years and a Yuga to a period of four years we can very easily calculate the date as shown below :-

The year of the beginning of the Mahākalpa or Kalpādi which was the same as Kalyādi i.e. beginning of Kaliyuga was B. C. 3102.

Deduct the years since elapsed—		B.C. 3102
Manus 6×288 =	1728	
Yugas 27×4 =	108	
Dwapara 3 =	3	
	1839	1839

Therefore the year of the battle was......B.C. 1263

11. The following verse from Vāyu Purāṇa proves the same thing.

महादेवाभिषेकात्तु जन्म यावत्परीक्षित:
एकवर्षसहस्रं तु ज्ञेयं पंचाशदुत्तरं (१००००–५०) ॥

Parīkhshit was the son of Abhimanyu and was born in the first year after the great battle. King Chandra Gupta whom the Greek writers mention by the name of Sandrokottas, is often called Mahādeva or Mahānanda in the Purāṇas. The coronation of Chandra Gupta took place in the year 312 B. C. and the verse mentions that 950 years had elapsed between the birth of Parikshita and the coronation of King Chandra Gupta. It is obvious then that in the opinion of Vāyu Purāṇa the great battle took place in the year 312 plus 950 equal to 1262 B. C.

12. Moreover the Mahābhārata contains many allusions to the five-year luni-solar Calendar of the Vedānga Jyotisha the date of which is proved to be B. C. 1400 (vide para : 5). This fact alone is sufficient

to establish the priority of the Vedānga Jyotisha to Mahābhārata, independently of any other evidence. Any date therefore which is subversive of the priority must be wrong. Mr. Kale's Purāṇa Nirīkshaṇa is a mine of information about the Purāṇas. A perusal of it is sure to convice how patiently and impartially he has toiled on to disentangle the truth from fiction.

The Gavāmayana†

13. Mr. Kale gives an interesting account of the means employed by the ancient Aryans for keeping up a progressive record of the years elapsed since the beginning of the Kalpa i.e. B. C. 3102. For this purpose they used to perform a sacrifice called Gavāmayana every fourth year, and to commemorate it by composing on each occasion a new verse of 64 syllables in Bṛihati Metre and adding it to the foregoing ones. The day of the Vishuvan that is, the day of the vernal Equinox was, I believe, chosen for these quadrennial sacrifices as being most suitable for testing the correctness of their reckoning by the actual observation of the sun rising due east on that day. Pandit Rudrapattan Shyāmshāstri of Mysore mentions that in one of such books called Bṛihadukta there are as many as 460 quadrennial verses. They thus give an account

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† The year of the present Egyptians called Coptes contains 12 months, each of 30 days at the end of which five complementary days are added and also a sixth one at the end of the fourth year. These days they call Epagomenes. Can there be any connection between the words Gavāmayana and epagomene which resemble each other so much both in sense and sound ? At present I leave it as a query.

The Puranic yugas in Sec. 12 are no doubt identical with the Gavāmayanas of the Smritis.

of the lapse of 460 × 4 = 1840 years since the Kalpādi or Kalyādi and thus bring the Aryan Chronology down to the year B. C. 3102 — 1840=1262 which is exactly the year next to that of the battle of Kurukshetra. This shows beyond any doubt what pains and care did the ancient Aryan Ṛishis bestow on their Chronology by making it a part of their religious duty. The charge that the ancient Hindus did not realise the importance of chronology is therefore groundless.

The summary of events in the order of time.

14. The following is a summary of what has been discussed in the foregoing pages. It shows that the literature of India, although it is in a legendary and mythological form, is based on much that is valuable and real. To discern facts from fiction in it, all that is needed is an impartial and intelligent spirit of research in the light of modern science.

B. C. 7500 The beginning of the era of Canopus described in the Bṛihat-Samhitā.

B. C. 7000 The probable commencement of the disappearance of the sea from the Gangetic basin.

B. C. 4350 The year of the first occultation by Jupiter of the Star Pushya, as mentioned in the Taittiriya Brāhmaṇa.

B. C. 3000 The age when the cluster of the Pleiades used to rise due East, as stated in the Śatapatha Brāhmṇa.

B. C. 1400 The date of the observation of the Solsticial Points described in the Vedānga Jyotisha.

B. C. 1263	The year of the battle of Kurukshetra ascertained from the Bhavishya and Vāyu Purānas.
A. D. 290	The initial point of the Hindu Ecliptic was fixed as being diametrically opposite to the star Chitra.

The Calendars in use in India during the present Kalpa.

B. C. 3100—B. C. 1400	The solar Calendar with a cycle of 4 years.
B. C. 1400—A. D. 300	The luni-solar Calendar with a cycle of 5 years.
A. D. 30C—Present time	The luni-solar and planetary Calendars with the Jovin cycles of 12 and 60 years.

Determination of the First Point of Aśvini.

15. This probem has hitherto baffled all attempts at solution. Eminent scholars like Colebrooke, Bentley, Whitney and Bāpudev have identified it with the insignificant star ξ picium on no other evidence but its extreme proximity to the Ecliptic within the limits of the Asterism Revati. Dr. Thibaut does not however concur in their opinion for the reason that it brings the composition of the early siddhāntas to a much later date than what is compatible with other considertions.

My friend Mr. Narhar Venkatesh Kolhatkar, B. A. has reccently discovered a stanza in the Pañcha Siddhāntikā of Varāha-Mihira and has succeeded in completely settling the question by its aid. The Stanza runs thus :—

पित्र्यस्य स्वक्षेत्रे षष्ठे चांशे (१२६°) समायोग: ।
चित्रार्धांश्रमभागे (१८०°) दक्षिणत: संस्थिते त्रिभिर्हस्तै: ॥

The Stanza occurs in a Section of the work devoted to the statement of the Latitudes and Longitudes of seven conspicuous stars favourably situated for occultation by the Moon. In this Stanza the longitude of the Star मघा (Regulus) is stated to be 126° and that of the star चित्रा (Spica) to be 180° from the common initial point on the sphere. The latter longitude shows that the First point of Aśvinī was situated diametrically opposite to the star Spica and the former longitude of the star Regulus fully corroborates this statement. There can be no doubt therefore that according to the original Sūrya Siddhānta the first point of Aśvinī lay 43′ to the East of the Star μ picium which was therefore the junction star of Revatī, and not ξ picium as hitherto supposed. The longitudes of the remaining 5 stars (पुष्य excepted) are in error of less than 2 degrees and therefore can not modify the above conclusion.

It is rather strange that a stanza giving such valuable information should be passed over by so many able scholars. Mr. N.V. Kolhatkar therefore deserves high praise for his happy discovery. Dr. Thibaut's failure can be partly attributed to the faulty emendation of the original Stanza, made by his collaborator Pandita Mahāmahopādhyāya Sudhākar Dwivedi of Benares. The discovery carries back the probable time of the composition of the five Siddhantas to a date not later than 300 A. D. which is earlier by a *century* assigned to it by Dr. Thibaut.

The conclusion.

16. I have tried in this paper to refer to a few of the pre-historic facts and to determine their dates in the light of modern science but on quite new lines of procedure, calling in the help of the unerring celestial eras of gigantic durations. I have also explained the method of calculating them. Should any future antiquarian be fortunate enough to meet with similar reference to the star Canopus in the Assyrian and Egyptain inscriptions, my table given in Section 7 will, I hope, help him at once in the determination of their date. The dates in the table may be compared to colossal light-houses set up by God to help men in their navigation, over the ocean of Time.

PERSIAN

PERSIAN AND ARABIC WORDS IN MARATHI.

BY

M. T. PATWARDHAN M. A.

The number of words of Persian and Arabic origin in use in the literary Modern Marathi is slowly dwindling down. Most of our educated men are well acquainted with Sanskrit ; and the effect of this knowledge on the development of Marathi has been conservative and to some extent unfortunate. Many words of Sanskrit origin that in course of centuries went through changes suitable to the genius of Marathi were roughly and ruthlessly restored to their original purity, and their naturalised forms were relegated to be used by women and by the uneducated. Ignorance of the historic development of the language and literature of Marathi has rendered a host of noble vigorous words of the 17th, 18th, and the first half of the 19th. centuries obsolete and dead. Thus while the natural resources of Marathi are lying unexplored and unutilised, the tendency of borrowing from Sanskrit is on the increase and is a sure sign of our linguistic bankruptcy.

In the department of philology there is a foolishly patriotic attempt made to trace every Marathi word through a real or an imaginary pedigree to its presumed Sanskrit ancestor. It was with a view to lodge an emphatic protest against this activity that the study of Persian and Arabic words in Marathi was begun. It was gradually discovered that a good many of the changes were uniform and regulated by certain fixed rules of

naturalization. Some of these rules may have to be modified in the light of further knowledge. Some new rules might be found out governing the changes of a few words which to-day appear to be arbitrary and unaccountable. It is with a hope that my efforts will inspire others to undertake to study the genius of Marathi, that a few of the results arrived at by me are placed here for sympathetic criticism.

1 अ preceded by आ (i) is changed to य:

आयना < आइना ; कायदा < काइदा ; कायम् < काइम् ; जिरायत् < ज़िराअत् ; नायब् < नाइब् ; फायदा < फाइदा ; लायक् < लाइक्.

(ii) or it is dropped: आदा < आइदा ; अजमास् < आज़्माइश् ; आरास < आराइश् ; जमात् < जमाअत् ; ताफा < ताइफा ; पैदास् < पय्दाइश् ; फर्मास् < फर्माइश्.

2 There are a number of words in which आ followed by long आ, ई or ऊ came to be pronounced short. There being no separate letter to represent this short ऑ sound, it was represented by अ or आ; and when represented by अ it came to be pronounced in course of time as such: अजमास, अदा ; अप्कारा < आब्कारा ; अब्नूस् < आब्नूस ; अब्दागीर् < आफ्ताब्गीर् ; अबाद् < आबाद् ; अस्मान् < आस्मान् ; चलाख् < चालाक् ; तलाव् < तालाव् ; बदाम् < बादाम् ; बबर्जी < बावर्ची ; पलाण < फा० पालान् [cp. सं. पल्ययणं;] अइन् < आईन् (rule); अलिजा < आलीजाह् ; हल्लीं < हाली ; हंशील < हासिल् ; अब्रू < आब्रू ; अलू < आलू ; दरोगा < दारूघा.

3 Penultimate आ is (i) changed in a few words to अ: दालन् < दालान् ; दौत् < दवात् ; नालस्ती < नारास्त + ई ; मिसल < मिसाल् ; मुलाखत् < मुलाकात् ; मुद्दारत् < मुदारात् ; सुरई < सुराही ; पायमल्ली < पाय्माली (ii) and in a few others is so drawled out that it is represented by आई or आय: बागाईत < बाघात् ; बिछाईत < बिसात् ; वायदा < वअ्दा ; मायना < मअ्ना.

4 Short इ preceded by आ is changed (i) to अ : अजमास्; अदा; आयना; आरास्; आशक् < आशिक्; काफर् < काफिर्; कायम्; खातर् < खातिर्; गाफल् < ग़ाफ़िल्; जाबता < ज़ाबिता; ताफा; दाखल् < दाखिल्; नाजर् < नाज़िर्; नायब्; पैदास्; फर्मास्; बातल् < बातिल्; मजालस < मजालिस्; मरातब् < मरातिब्; माफक् < मुवाफिक्; मालक् < मालिक्; मुशाफर् < मुसाफिर्; लायक्; लवाजम् < लवाज़िम्; वाकब् < वाकिब्; वाजवी < वाजिब् + ई; वारस् < वारिस्; शिफारस् < सिफारिश्; सादर् < सादिर्; हजर < हाज़िर्.

(ii) or being penultimate is made long काबीज् < काबिज़्; काबील् < काबिल्; जामीन् < ज़ामिन्; जाहीर् < ज़ाहिर्; जवाहीर < जवाहिर्; जालीम् < ज़ालिम्; फाजील < फ़ाज़िल्; शाबीत् < साबित्; शाहीर् < शाइर्; सामील < शामिल्; साईस् < साइस्; हंशील्;

5 इ followed by या is dropped : अखत्यार < इख़्तियार्; प्याला < पियाला; प्यादा < पियादा; म्यान् < मियान्; or (ii) आ is substituted for both : कज्जा < कज़ीया; गाशा < ग़ाशिया; जादा < ज़ियादा; जाफत् < ज़ियाफत्; तकवा < तक़्विया; दानत् < दियानत्; शाई < सियाही; शास्त < सियासत्.

6 Short इ followed by ह is changed to ए : चेहरा < चिह्रा; जिरे < ज़िरिह्; फेरिस्त < फिह्रिस्त्; बेहत्तर < बिह्तर्; मसाले < मसालिह् मेहनत् < मिह्नत्; मेहराफ् < मिहराब्; मेह्रेर < मिह्र्; शेतखाना < सिह्हत्ख़ाना.

7 Long ई followed by आ is generally shortened to इ: अलिजा; इमान् < ईमान्; इराण < ईरान्; कबिला < कबीला; खजिना < ख़ज़ीना; खिसा < कीसा; गंजिफा < गंजीफा; गालिचा < गालीचा; जिना < ज़ीना; दिवाल् < दीवार्; पिसाब् < पीशाब्; बिचारा < बीचारा; बिमार < बीमार्; मिजान् < मीज़ान्; मिना < मीना; मिरास् < मीरास्; शिसा < शीशा; शिया < शीआ;

(ii) but is changed to एं in तबेला < तवीला.

8 उ followed by ह is changed to ओ : तोहमत < तुह्मत्; मोताद् < मुह्ताज्; मोहबत् < मुहब्बत्; मोहीम् < मुहिम्म्; मोह्रा < मुह्रा; मोहोर < मुह्र्; मोहरम् < मुहर्रम्; मोसबा < मुहासबा; सोबत < सुह्बत्.

9 उ followed by आ is dropped : माफ < मुआफ्; माफक < मुवाफिक्; मामलत् < मुआमलत्; मामला < मुआमला; मार्फत < मुआरफत्.

10 Penultimate उ like penultimate इ is lengthened चाबूक्; झूल<जुल्ल ; नाजूक् ; पूल्.

11 ऊ followed by आ is shortened to उ : सुलाख<सूराख् ; कुजा<कूझा ; तुमार<तूमार् ; दुबार् ; तुफान्<तूफान् ; नमुना<नमूना ; सुभा <सूबा.

12 The second conjunct in monosyllabic words is split up (i) by अ : इलम्; इसम्; उमर; क़दर् ; कबर् ; कसब् ; कसर् ; कहर् ; गरम् ; जखम्<झघ्म् ; जरब<झर्ब् ; जहर <झह्र् ; दफन्<दफ्न् ; दरद< दर्द् ; नगद्<नक्द् ; नजर्<नझ्र् ; नरद् ; नहर् ; नरम्; फजर् ; फरक्; फरस्<फर्श ; फरज्<फर्झ् ; फरद् ; बरफ्; मगज्<मघ्झ् ; मरद्; मोफत्<मुफ्त् ; वखत्<वक्त् ; वजन्<वझ्न् ; शहर्<शह्र् ; सरवत्<सर्व्त् ; सदर् ;

(ii) by long ई if the preceding vowel is short इ : जिकीर<झिक्र् ; फिकीर<फिक्र् ; शिलींग<शिल्क् ; हिरीस्<हिर्स् ;

(iii) by long ऊ if the preceding vowel is short उ : उजूर्<उज्र् ; उरूस्<उर्स् ; कुलूप<कुफ्ल् ; गुरूज्<गुर्झ् ; जुलूम्<झुल्म् ; बुरूज् <बुर्ज् ; झुलूप<झुल्फ् ; मुलूख<मुल्क् ; हुकूम्<हुक्म्.

13 The conjunct स्त् alone was kept unsplit: गस्त्< गश्त् ; तस्त्<तश्त् ; फस्त्<पस्त् ; बंदोबस्त्; मस्त्; सुस्त्. Then the educated began to keep र्द् and क्त् unsplit : खुर्द् ; जर्द्<झर्द् ; दर्द् ; फर्द् ; मर्द् ; सर्द् ; तक्त्<तख्त् (note however तकट derived from the same word) नक्त्<नक्द् ; वक्त्; सक्त्; and lastly the conjunct is retained in the following words : इश्क् (इशक was used) अर्ज्<अर्झ ; कर्ज्<कर्झ् ; खर्च् ; गर्क्<घर्क् ; शर्त्; उर्फ् and बर्फ्. This tendency to stun over अ between क् and त् and between र and क् or ख् is responsible for the forms अर्क, वर्ख and फक्त which were originally अरक्, वरक् and फकत् respectively.

14 Islamic words in being naturalised in Marathi appear to have dropped all doubling of consonants. कसाब<कस्झाब् ; दलाल्<दल्लाल् ; नबाब्<नव्वाब् ; फरास्<फर्राश्; बकाल<बक्काल् ; हमामखाना<हम्माम्खाना; हमाल्<हम्माल्; हजाम्<हज्जाम् ; सराफ्<सर्राफ् ; अलबत्<अल्बत्ता; अवल्<अव्वल् ; कुवत्; गुलछबू<गुल्शब्बू ; खास्<खास्स् ; तालुका<तअल्लुका; तवकल्<तवक्कुल; तुरा<तुर्रा; दिमत्<

झिम्मत् ; मनुका<मुनक्का; मयत्<मय्यित् ; मिनत्<मिन्नत्; मुदत्<मुद्दत् ; मुर्वत् <मुरव्वत्<मुरूवत् ; मोर्तब<मुरत्तब् ; मोहबत्<मुहव्वत् ; मोहरम्<मुहर्रम् ; नाहक्<नाहक्क; शेतखाना<सिह्हतखाना; हुजत्<हुज्जत् ; रोजमुरा<रोजमर्रा.

15 But Marathi developed certain double consonants (i) In all monosyllabic words if the conjunct ended in ल् the first consonant of the conjunct became double before taking the separating अ : अक्कल्<अक्ल् ; अद्दल्<अद्ल् ; अम्मल<अम्ल् ; अस्सल<अस्ल् ; कत्तल्<कत्ल् ; गज्जल्<ग़ज़्ल् ; नक्कल्<नक्ल् ; फस्सल्<फस्ल् ; रत्तल्<रत्ल् ; शिक्कल्<शिक्ल् ; अत्तर्<इत्र् ; हुन्नर्<हुनर् ; बेहेत्तर्<बिह्तर् ; बहाद्दर्<बहादुर् ; जिन्नस्<जिन्स् ; रक्कम्<रक्म् ; मुक्काम्<मुकाम् ;

(ii) If ला or ली in words of two syllables is preceded by अ or short इ the ल becomes double : अल्ली<अली; अल्लाउद्दीन् <अलाउद्दीन् ; किल्ला; किल्ली<किलीद् ; गिल्ला<गिला; जिल्हा<झिल्ला<झिला; पायमल्ली<पाय्माली; फैसल्ला<फयसला; सल्ला<सलाह् ; हल्ली<हाली; हल्ला<हम्ला; हिल्ला<हीला; इतल्ला<इत्तिला;

(iii) In a few words of two syllables when the second letter has long आ or इ and the first has short अ or इ the consonant of the second letter becomes double : निक्का<निकाह् ; नक्की<यकीन् ; सद्दी<सअ्द्+ई; हुद्दा<उह्दा; कित्ता<किताब् ; मत्ता<मताअ्; फन्ना<फना; रब्बी<रबी; बिब्बी<बीबी.

16 The following are examples of metathesis : अजून्<हनूस् ; अस्तनी<आस्तीन् ; अनामत्<अमानत् ; अमदानी<आमदनी; कुलूप्<कुफ्ल् ; गंज<झंग् ; जनावर<जान्वर् ; जिल्हा<झिला; तोशीस्<तवशीश् <तश्वीश् ; नक्की<यकीन्; पलिता<फतीला; पन्हा<पनाह<पह्ना; बखर<खबर् बुड्डक्<बुझुर्ग्; मनुका<मुनक्का; महशूर<मश्हूर् ; शहाम्रग<शाह्मुर्घ् ;

Changes

17 Consonant changes are not discovered to be quite regular; and so I shall in many cases content myself with only noting them.

(i) क् is changed to ख् in the following : इलाखा < इलाका; चलाख < चालाक्; मिळखत् < मिल्कत्; मुलाखत् < मुलाकात्; मुलूख् < मुल्क्; इलाखी < इलाक् + ई; बुरखा < बुर्का; वखत् < वक्त्; वाखा < वाकिआ; वर्ख् < वरक्; रोखा < रुक्आ; पोशाख् < पोशाक्; खबूतर् < कबूतर्; खिसा < कीसा; खिसमिस् < किश्मिश्; खुजा < कूझा; खुर्ची < कुर्सी; खुर्नीस् < कोर्निश्; दिमाख is derived from दिमाघ् and बेचिराख < बीचिराघ्.

(ii) क् is changed to ग् in the following : तगादा < तकाझा; तगाई < तकावी; नगद् < नक्द; नगारा < नकारा; मग्दूर् < मक्दूर्; मशागत् < मशक्कत्; हकीगत् < हक़ीकत्.

18 ख् is changed to क् in the following :—किताब < खिताब्; मस्करी < मस्खरई;

(ii) ख् preceding त् or श् is changed to क्; कंबक्ती < कम्बख्ती; पोक्त < पुख्त्; तक्ता < तख्ता; सक्त < सख्त्; बक्षी < बख्शी; बक्षीस < बाख्शिश्.

19 ज् is changed to द् in the following:--कागद् < काघझ्; गुदस्तां < गुझश्ता; तगादा < तकाझा; बुद्रुक् < बुझुर्ग्; मोताद् < मुह्ताज्; नदर् < नझर्; हौद < हौझ्.

20 द् is changed to ज् in the following:—खिजमत्; नजीक् < नझ्दीक्; मजूर < मझ्दूर; बुर्जी < बुर्दी.

21 ग् final is changed क् in the following:—मुबलक्, बुद्रुक्.

22 झ् is uniformally changed to ज् but it remains to be seen where this ज् is palatal and where dento-palatal.

(i) Final ज् is dento-palatal except in कबीज्;
(1) from ज्—इलाज्; ताज्; फौज्; बुरूज्; रिवाज्.
(2) from झ्-अर्ज्; अंदाज्; ऐवज्; कर्ज्; गज्; गरज्; जहांबाज्; जहाज्; तजवीज्; फरज्; मगज्; मेज्; रोज्.

N. B.—घ् and झ् are uniformally changed to ग् and ज् respectively.

(ii) Initial ज is similarly dento-palatal except in जवानों; and in जहांगीर, जहांपन्हा when it is occasionally dentopalatal.

(1) from ज्:-जवाव्; जमा; जमात्; जनावर्; जवाहीर्; जहांवाज्; जहांगीर्; जहाज्; जलसा.

(2) from झ:-जप्त; जकात्; जखम्; जरूर्; जब्र्; जमीन्; जवानी; जनाना; जर्; जरव्; जर्द्.

(iii) Medial ज is similarly dentopalatal except in मेजवानी the pronunciation of which is modelled upon that of जवानी and in अजव.

From झ्:—हुजत्; गहजव; नजर्; नाजर्; हजर्; लवाजमा; लज्जत्.

(iv) जा appears to be very arbitrarily pronounced one way or the other; Palatal from जा; दर्जा हजाम; जामानिमा; from झा; कज्जा; कुजा; कबजा; गुल्जार्; जाहीर; जालीम; मजा.

Dentopalatal <जा; इजारा, जागा, जाव, जासूद्, जामदार्, दर्जा, सरंजाम्.

,, <झा; आजार्; इजा; जामीन्, ताजा, हजार्, हजारा, रजा; विजार्; बाजार्; मजा.

(v) जि, जी are never dentopalatal:—

From ज; अंजीर; खंजीर; गंजीफा;

,, झ; अर्जी, इतराजी; ऐवजी; काजी; गाजी; खजीना; जिकीर्; जिम्मा; जिरायत्; जिल्हा; जिनगानी; जीन्; ताजीम्; दर्जी; नंजीक; फर्जी; फजीती; फाजील; मर्जी; राजी; सार्जिंदा; हजीर.

(vi) जु, जू are dentopalatal :—From ज् माजूम; From झ; जुलूम्; तराजू; बाजू; मजूर्; हुजूर्.

(vii) In compounds ज् is dentopalatal; as in मज्लस; मज्कूर; मज्बूत; जुज्बी; हज्रत.

23 त् is changed to द् in वदक्<वतक्; तोस्तान्<तोश्दान्; अबदागीर्<आफ्ताब्गीर्.

(ii) Final त् is indifferently changed to द् or retained. ताकत्–द्; ताबूत्–द्; नाबूत्–नाबूद्; नौबत्–द्; पसंत्–पसंद्;

(iii) Final द् is changed to त् in खुशामत्, मदत्, पसंत् and नाबूत्.

24 द् is changed to ड् in डफ् and डाग्.

25 (i) न् after र् becomes ण्:–इराण्; कर्णा; कुराण्; गुजराण्; तराणा; दुर्बीण्; नजराणा; बऱ्हाणपूर; परगणा; हैराण्; वैराण्.

(ii) न् is changed ण् in the following:—बयाणा, फलाणा, मुलाणा, दिवाणा, निशाण,—दाणी; दाणा; फणस, बुणगा, बहाणा; सावण; and in नलीम्, न् is changed to ल्.

26 प् is changed to फ् in फस्त; but फ् is changed to प् in अश्राप्, कुलूप्, तप्शील्, दप्तर्;

27 ब् is changed to फ् in शिताफी and in तलफ्<तलब् but to प् in the following:—गुड्डप्<गुरूब्; खूप्; जप्त्; अप्कारा; चोपदार्; किनखाप्.

28 ब् is changed to व् in the following:—गिलावा; तावदान्; तलाव्; बागवान्; मेजवानी; वरात्; वाजवी; and व is changed to ब in the following खल्बत्; जबाब्; जुजबी; तबेला; तस्बीर; नबाब्; बिदागी; बिशाद्; बवर्जी.

29 व् joined to र् becomes भ्र; as अभ्रक्, अभ्रा, इभ्रत्, इभ्रामखान, कारभार. In भिस्ती<बिहिश्ती the ह् coalesces with ब and सुभा<सूबा is perhaps so by way of analogy with सुभा.

30 र् is changed to ड् in the following कुडतें; गुड्डप्; झाड्; जोडा; पडदा; बडतर्फ; मुडदा. र् is changed to ल in the following; दालचिनी; दिवाल्; मलम्; नालस्ती; सुलाख्; सहल्; खलिता.

31 (i) श् joined to त् is changed to स्:–कुस्ती; गस्त्; गुदस्त्; गुमास्ता; तस्त्; पुस्ती; फेरिस्ता; शिरस्ता.

(ii) Final श् is changed to स् :—अजमास् ; आरास् ; खिसमिस् ; खुर्नास् ; तलास् ; तोशीस् ; पैदास् ; पायपोस् ; फरस् ; फरास् ; बक्षीस् ; लास् ; शाबास् ; शिफारस् ; शिस्त् .

(iii) Initial श् is changed to स् in the following सत्रंजी; समशेर; समई; सरकन्; सरवत्; सार्मील्; सुतर्; सुजाउद्दौला; सुरवार्; सुरू; सुमार्; सैतान्.

(iv) श् is changed to छ in the following words गुल्छबू ; छबी; छबिना; छानदार; बिछाईत however is from बिसात.

32 (i) स् followed by इ or ई becomes श् :—शिक्का: शिफारस्; शिपाई; शिकंदर्; शिद्दी<सिद्दीक् ; शिरपाव; शिरका; शिरस्ता; शिलेदार; शिवाय; फारशी; नामोशी; खलाशी; तपशील; तहशील; वशीला; इंशील; तक्षीर्; तक्षीम्; नशीब्; मशीद् .

(ii) स् is changed to श् in शाबीत्; शाई; शेतखाना; ताशा; मुशाफर्; हिशेब्.

(iii) स् followed by ब् is changed to ज् as in तजबीर्, कजबीण्, अजबाब्, निजबत्.

33 Final consonants after आ, ई or ऊ being indistinctly pronounced are dropped.

(i) ह् is dropped in:—अलिजा; असफजा; अफवा; जागा; तनखा; दर्गा; निका; निगा; पागा; बुणगा; सल्ला; वाहवा; छबी; तंबी; सद्दी; गू ; जिरे; मसाले.

(ii) क् is dropped in:—शिद्दी;

(iii) न् is dropped in :—कलाबतू ; कानू ; खुर्जी; फर्जी.

(iv) द् is dropped in :—किल्ली.

(v) य् is dropped in नक्की<नकीय<यकीन्.

(vi) ब् is dropped in :—जोडा; झाडू; कित्ता.

34 (i) Final ही is often changed to ई as in बादशाई, शाई, सुरई, सरबराई, शिपाई.

(ii) ह is dropped in the following words :—तारसखाना; पैल्द ; पैलवान्; फेरिस्त; फज्जा; फजीती; मसलत्; मुलाजा; मुशारा; मोताद् ; मोसबा; सोबत् .

35 ह् coalesces with the previous syllable in गुन्हा, तन्हा, जहांपन्हा, मुभा, and खोखो<काह्काह्; ह् appears to be inserted in the following words गहजब्<घझब्; जिल्हई<जलाई; कल्हई<कल्ई.

36 (*a*) In अंबारी<इमारी; कंबर<कमर; उंबर<उमर; खंबीर<खमीर्; a ब् is inserted.

(*b*) In जिंद<जिन्न्; कंद<कन्; and बुंध<बुन् a द is added to न्.

(*c*) मुरंबा<मुरब्बा is so formed because of its connection with अंबा; शंकरपाळा is derived from शंकरपारा cf. the other form साखरपारा.

The final व in उमराव and शिरपाव is due to popular etymology which connects the words with राव and पाव (Hindi for foot) respectively.